OLD NEWSPAPER WORKSHOP

STATE OF CALIFORNIA

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

MARKET DEVELOPMENT WORKSHOP

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Vicki L. Medeiros, C.S.R.
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A P P E A R A N C E S

WORKSHOP MODERATOR:

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I N D E X

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P R O C E E D I N G S

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MODERATOR HUSTON: My name is Bill Huston. I would like to welcome you here this morning for the Old Newsprint Workshop on market development. This is the sixth workshop that either the staff or the Committee have conducted looking at the barriers and possible solutions to secondary material market development here in the state.

Basically, what we're trying to do is to solicit as much public information, as much public comment, as many suggestions as we possibly can on how to stimulate markets within California for the targetted secondary materials.

We hope to bring all of this information together within the next couple of months. In November, we will be holding a public workshop with our Market Development Committee to discuss action plans of specific items that the Board and the Committee and staff can initiate to stimulate markets.

As I say, in November we're going to be looking at compostables, at mixed paper and at two grades of plastic. In December, we'll be looking at the other material types and the actions that might be proposed to stimulate those markets, that being ferrous metal, pavement, glass and other paper.

I'm delighted to have an additional panel member, Dan, it's good to see you again. We're still waiting on one, but we do want to get started.

I want to introduce the panel. There are copies in the back of the room of the Agenda for both this morning and this afternoon workshops. There is also a list of the panelists.

On the back of the Agenda is the list of the panelists.

Brian, do we have the questions that we are going to answer someplace?

MR. FORAN: I could get copies of the original Notice.

MODERATOR HUSTON: We will be addressing six questions today. In turn, after we complete a question with the panel discussion, I would be delighted to have people from the audience to come up and ask questions, offer suggestions, ask for clarification.

It's a fairly small crowd today, so I would like this to be just as informal as it possibly can be. If you have comments or if you have questions to ask, please feel free to do that. Just raise your hand or just walk up to the podium and begin talking.

I want to introduce the panel. On the far end over on your left is Dan Cotter. Dan has been involved with the recycling industry for about nineteen years, with the Arcata Community Recycling Center, with the Sonoma County Environmental Center. He's been involved with scrap metal collection and processing, with the San Francisco City and County recycling as their coordinator.

He is currently the Vice President of Recycling Market Development for Norcal Waste Systems. Something I'm going to be very interested to learn from Dan today is there's a project that he's working on in West Sacramento with MacMillan Bloedel, and some information that you may have heard a few minutes ago on the status of that project.

Dan, we're delighted to have you here again. Dan was here several weeks ago on our panel on mixed paper discussion.

I will not introduce Stuart Douglas as he's not here yet. If he does arrive, we will break and introduce him at that time.

On my left is Harry Miller. Harry is the Recycling Coordinator with Tracy Delta Disposal Services, brokering recyclables. At the same time, he's working with the California Waste Removal Systems, Incorporated, providing marketing services, AB-939 representation and MRF operational efficiency improvement services.

Formerly, he was the Director of the Central Waste West Coast Region, Cascade Fibers International, here in Sacramento, and developed bulk accounts of suppliers and end users of recycled materials.

Prior to that, he was with Smurfit Recycling Company, also here in Sacramento, and that company purchased and sold recycled materials in support of their processing plant.

A couple of other things about Harry is that he has more than seven years managing a recycling processing plant, he has provided consulting services in recycling, marketing recyclables and material recovery facility efficiency and five years brokering and sourcing recyclables.

Welcome to the panel today, Harry.

On the far end is Bill Nielsen, of Nielsen and Nielsen, Incorporated. Bill in the past has worked for Garden State Paper in Pomona, that many of us now know as Smurfit Newsprint Plant down there.

He opened his own secondary fiber exporting business in 1976. He is now selling to over forty countries internationally.

He's the past Chairman of the Paper Stock Institute. He is currently a Director of the California Wastepaper Dealers Association. So, welcome, Bill.

With those brief introductions, I would like to turn the program over to Brian Foran, from the Market

Development branch staff. Brian is the author of the Staff Report that is in the back of the room, if you don't already have a copy.

He will give us a brief overview of what he found in that report and set the stage for the discussions throughout the morning.

MR. FORAN: Thank you, Bill.

The six questions which we were going to address, a couple of which deal with barriers to secondary materials markets are coming down here. I have overheads that we will put up when we address the questions, for people in the audience. We will have those shortly on the back table.

I would like to give some background information on the status of old news markets here in California, and then touch upon the barriers which are identified in the Market Status Report for Wastepaper, which are specific to old news markets.

Here are some of the statistics identifying both potential and actual supply of old newsprint in California. You can see there are two sets of statistics here.

On the left side is the SRRE Data. That refers to the City and County Source Reduction and Recycling Elements statistics that are turned into the Board, and these statistics represent 85 percent of California's population.

From these statistics, it shows that old news is presently at a 30.7 percent recovery rate. The tons generated in the state is what I have indicated as potential supply. Of course, not everything that is generated is economically a part, or is not an economical source of supply, but for theoretical purposes, that's the pool of old news out there that potentially could be recovered and used in secondary markets.

The other set of data, that has the Western Markets Study Data heading, refers to a study that is being performed for the Board by R.W. Beck and Associates, and the paper component of that is being performed by Jaako-Poyry Consulting.

They have come up with some slightly different figures for tons of news generated in the state, slightly less than what is implied by the Source Reduction and Recycling Elements, and slightly higher level of recovery.

I would put a great deal of confidence in the statistics on the right-side. Jaako-Poyry is kind of privy to information at mills and otherwise which people who are putting together the waste composition studies for cities and counties are not, and I intend to use these statistics in revising the Market Status Report, which right now is in draft form.

Anyway, whether it's 30.7 or 44 percent recovery, there's still a good deal of room for increased recovery for news, that is from a collection aspect.

American Paper Institute conservatively has them at economically feasible recovery of ONP is in the 50 to 55 percent range. We can certainly increase our recovery rate as long as the markets are out there.

Sources of demand for ONP recovered in California, are basically, there are basically three catagories for that demand. One is foreign markets, which have the bulk or which provide the bulk of demand for ONP, as the table shows 39 percent.

In-state mills, which includes both the one recycled newsprint mill in the state, which in fact is the only newsprint mill in California, plus a host of other paper and paper board mills, provide that demand.

There is a certain demand provided by alternative markets, such as cellulose insulation. We were hoping to have Stuart Douglas, with Fiberwood, representing the alternative industry perspective. Maybe he will come here.

We don't have statistics on alternative uses for ONP. They're simply not available. It's hard to estimate just what percentage of overall demand the alternative markets provide.

There is also a good deal of news which goes out of the state. Most of that goes to a couple of newsprint mills up in Oregon that are operated by Smurfit Newsprint Corporation, the same company that operates the newsprint mill in Pomona.

There are also some new projects coming on line.

This top table actually just provides demand by the existing mills that are consuming newsprint here in California. The top one is the Pomona mill.

The other four mills are mills outside of the state. These provide the primary bulk of the domestic ONP demand other than what is consumed in-state.

As I was saying, there are some projects which are coming on line. I do not know if you can read that back there. The sheets are in the back if you want to follow along.

The one project which is the furthest along, much beyond the conceptual stage, that would provide a strong demand for old newsprint is the MacMillan Bloedel newsprint mill which has been proposed for West Sacramento, proposed to be built here in West Sacramento, and for those of you who are from this area or are just following the market developments for newsprint, you will be well-aware of the ongoings of the attempt to get that mill sited here in West Sacramento.

Dan Cotter is actually representing that mill as far as trying to line up their supply of newsprint. I'm sure he will have some comments about the status of that project and its likelihood of being sited here in Sacramento.

These figures here on the bottom are market prices for old newsprint, dating back to September 1987. I think they provide a good illustration of where newsprint markets have gone over the last five years. These are approximate prices of which newsprint mills, kind of an average of both off-shore mills and domestic mills have paid for newsprint. You can see that prices have more than come down more than half since 1987.

This really highlights the need for developing newsprint markets, at least from the collection perspective. I'm sure the mills would be more than happy if the market situation of over-supply and under-demand continued.

From the State's perspective trying to make sure our collection programs are economically viable, we would like to see more demand that will drive that market price up and make our collection programs economically viable.

I just want to touch upon some of the barriers that were identified in the Market Status Report, barriers to developing markets for wastepaper. I'll just touch on those which are specific to newsprint.

One of them, the first one that was identified was subsidies to the timber industry, which essentially makes supply of virgin fiber below the actual cost that paper companies would have to pay for it otherwise, without the subsidies, and consequently, that makes secondary fibers, ONP, that much less able to compete.

So, the mills will choose to use virgin fiber rather than secondary fibers. The Board is doing a study on this issue. It's not really set in concrete that these subsidies are significant enough to really much of a difference one way or another to paper companies switching to secondary fiber versus virgin.

It's certainly an issue that's worth looking into, and the Board is contracting a study right now to assess the impacts of these subsidies to the timber industry.

Poor economy of scale for recycled paper mills, actually the recycled paper mills that are putting out newsprint, the Smurfit groups, the new mill, Weyerhauser's new mill in Longview, or their new deinking project there, actually operated on a very large scale, however, compared with virgin mills, there is -- they really aren't putting out the numbers that the Canadian virgin newsprint mills, which some of them are switching over to deinked newsprint, but simply the fact that they are not putting out as much creates a lower economy of scale.

Anything that we can do to increase demand for recycled product which allows them to produce more, will allow them to operate on a higher economy of scale and thus be more competitive with virgin product.

High cost of deinking equipment has been a barrier, not only for newsprint but other wastepaper grades. The Board right now is considering various alternatives, financial incentives for paper manufacturers to encourage them to purchase deinking equipment which will allow them to use secondary fibers, such as ONP.

High wastepaper transportation cost, this has always been a problem, particularly for newsprint here in California since a good deal of it does go out of state.

Probably the best way to address that is to get the mills closer to the source. That is one of the reasons MacMillan Bloedel is considering siting here in California because a great percentage of the market is here, rather than manufacturing recycled content newsprint, which is now required of newspaper publishers here in our state to use, at least the percentage of their use needs to be recycled content newsprint, it makes more sense for manufacturers to make the paper right here rather than make it up in Canada and ship it down.

Anything that the Board can do to encourage siting of the recycled paper mills here will offset those high transportation costs.

That's the bulk of the barriers that are pertinent to old news. One of the questions that we will ask the panelists are just what they consider to be the greatest barriers for further developing markets for newsprint.

Is this Stuart?

MODERATOR HUSTON: Thank you, Brian.

Welcome Stuart. Before we ask some questions of Brian, I would like to introduce Stuart Douglas, who is here.

He is currently with Douglas Homes and has been in the construction industry since 1977, so for sixteen years or so, fifteen, sixteen years. He is also the owner of Fiberwood, Incorporated, a manufacturer of cellulose insulation.

He is here to represent alternative uses to old newsprint other than turning it back into paper. Welcome, Stuart. I'm glad you could make it this morning.

Are there any questions of the panel regarding Brian's report or clarification of data? Anybody?

Anybody from the audience have any questions?

Okay. Excellent.

I would like to waiver just a tad from the Agenda and ask each of the four panelists to make a brief introductory remark and perhaps share with us what they think that the greatest barrier is right now or market condition that they think we need to address and put them on the spot.

Dan, since you've been here before, I'll start with you.

MR. COTTER: I was first last time, too.

My name is Dan Cotter. I currently have my own company, Secondary Resource Markets. I work primarily in the market development field, working with small and large businesses in supplying them with wastepaper, scrap metal, glass, whatever they need.

The major project I'm working on, as some of you already know, is the MacMillan Bloedel project, proposed newsprint recycling plant that would go a long way towards solving some of the market problems for newsprint in California, especially with the curbside programs.

Your question, I guess, is really going to question one, greatest barriers?

MODERATOR HUSTON: We can certainly allow the introduction and then move right into the question.

MR. COTTER: You asked the question about barriers.

MODERATOR HUSTON: Basically what I was

interested in if there is a general statement that you want to make about the market or barriers, we could get into the detail when we address the questions.

MR. COTTER: I guess --

MODERATOR HUSTON: I was really interested to know what is happening with MacMillan Bloedel.

MR. COTTER: Let me first of all just say that probably the biggest issue that we face is that collection systems are much easier to set up and much faster to set up than manufacturing facilities.

That's the reason why we're heading down the path we're heading and possibly towards a situation the East Coast experienced five or six years ago where paper supplies went into the negative numbers. It's a major problem in California. It's a major barrier to recycling and promoting recycling, negative prices for commodities.

From the development side, the major barriers, especially in California, is the permitting process. It's a very long and timely process. It will keep us from really meeting some of the time lines that AB-939 envisions, a 25 percent, 50 percent recycling rate, 1995 and 2000 respectively, and manufacturing facilities will not be able to develop that quickly to meet the kind of supplies that AB-939 envisions. I think that's a barrier to the recycling collection program.

Beyond the permitting, probably the major issue for any small or large scale manufacturing is capital. Capital is hard to obtain right now. Bankers are very nervous about loaning money. The economy is very poor. Manufacturers themselves are concerned about borrowing money to produce products that they're not so sure that they will be able to sell their finished product at the kind of price to be economical.

I say those things to kind of set the stage for the answer that you really wanted was the status of the MacMillan Bloedel mill. The President of MacMillan Bloedel was making a speech in Canada, maybe a week ago or sometime last week, and was making some offhand comments about how terrible the economy is, how hard it is to get money, and et cetera, et cetera, and has been misquoted down here as saying that the MacMillan Bloedel project is cancelled.

The project is not cancelled. However, those issues that he expressed in his speech are very real issues. The economy is very poor worldwide. Demand for newsprint is low. The price for newsprint is very low. The economics of this particular facility is very poor at this point in time.

I guess the good news, to some extent, although I talked about it being bad news earlier, the good news is that the permitting process in California will take another six to eight months, and hopefully in six to eight months things will look more positive economically, and the financial situation of the mill will look more positive and banks will be more willing to loan money.

So, that's really the tenor of those comments. The real issue that is being faced with that plant now is that the economics for newsprint is very poor.

I think the reason that some of this has really blossomed is people looked at this as a real situation that MacMillan Bloedel may pull out of California because the Smurfit Corporation two weeks ago or so decided that they were going to indefinitely postpone their project in New York, and for some of the same reasons that MacMillan Bloedel is being quoted as cancelling here in California, conditions for opening a new, especially newsprint producing, facility today is horrible.

The price of producing newsprint is far above the sales price of newsprint. Everyone manufacturing newsprint now is losing money.

That's enough of that.

MODERATOR HUSTON: Thank you, Dan.

Stuart.

MR. DOUGLAS: I am Stuart Douglas. I'm the owner of Douglas Homes, Incorporated, as well as Fiberwood, Inc.

I came into this scenario really by the backdoor as a builder, there in the Tahoe area. We became concerned over the availability of insulation, and coincidentally a large manufacturer of insulation in Benica, California, decided to relocate out of California, primarily due to the woes that we are having with worker's comp, and taxation, and on and on and on, as any businessowners will understand what I'm referring to, which left us with somewhat of a hole for our source for insulation supply that we were using.

We decided to research the area, and decided on Sacramento to open up a new manufacturing plant, a facility here that makes several building products, insulation, hydroseeding mulch, just to name of couple of them now.

The barriers for this, the only one I see right now, there is an adequate source supply here in the Sacramento area. One part that really is irksome to us at the plant is that the product, in this case the ONP or newspaper, is really not designed for the uses for recyclers ourselves, it was really designed for the intended use of the buyer, but when we get it at our facility, we have to contend with the inks, the staples and the other garbage that is mixed in.

The point of contention that I have with our source, that is that we hope somehow to instigate ways in which we could design the product itself so that we can accept it at the plant in an easier fashion. I mean the inks, the staples, are the two most critical items right off the bat.

Besides that, as you have heard today, the source of newspaper is very abundant and the price is excellent, and a manufacturer in my shoes who takes advantage of this situation has nothing but good things to say for it.

MODERATOR HUSTON: Okay. Thank you.

Harry.

MR. MILLER: I think the price is somewhat less than excellent from my perspective.

I'm Harry Miller. I represent Tracy Delta Disposal and the California Waste Removal Systems, both in San Joaquin County. We handle the solid waste disposal for probably 50 percent of the population of the county, north and south, Stockton being in the middle and handled by other companies.

Dan covered most of the things that I would say from my perspective and do not know what is left for all intents and purposes.

The biggest barrier from what I see is the lack of demand for products. We keep generating more and more newsprint, and we keep recovering more and more newsprint, and the demand is not expanding at the same rate as the supply is.

Five years ago I said in a seminar here in Sacramento that I think Dan chaired, as a matter of fact, that one of the fellows at the seminar made the comment, well, if we just generate big piles of stuff, someone will come up with a use for it.

Unfortunately, that's not the case. One of the negatives that we run into from the collection perspective is that when you run into a situation like Minneapolis did, collecting a great deal of newsprint and they were buying, the mill went down for a period of time over a labor dispute, and they ended up taking that newsprint to the landfill, all the old newspapers.

Everybody says, gee, what are we saving that stuff for if it goes to the dump anyway? It's a very real danger that we need to look at.

Unless the demand increases, the price is driven down right now on the East Coast that you have to pay to get rid of it as opposed to getting paid for the materials.

We're fortunate on the West Coast in that we do have the Pacific Rim to help support us and keep us at least in positive numbers so that there is some return at least that helps defray some of the cost of the program or collections that we run into.

We all face the same problems with the availability of capital for any expansion. We're running into that in Tracy where we're attempting to site a material recovery facility there that generates more newsprint. We are having difficulty with the capital on that.

The cleanliness issue is one of our concerns. A lot of it depends on the collection mechanism. A lot of the newsprint comes from curbside programs. You get a lot of stuff in with it.

It's somewhat of a task to educate the public that cleanliness is of essence in setting up a collection program. They have difficulty understanding that high grade paper and newsprint is not compatible. These are some of the issues that we run into.

MODERATOR HUSTON: Thank you.

Bill.

MR. NIELSEN: I'm Bill Nielsen, with Nielsen and Nielsen.

From the export scenario, which is the reason that I'm hear, Asia, of course, consumes more and more of the old newspapers generated from the West Coast.

From Brian's report, in 1981 it was 54 percent domestic consumption, to 46 export. In 1991, it was 39 percent domestic and 61 percent export. It's obviously the biggest consumer of old newspapers.

The growth rate in all of Asia has been good, with Korea and Taiwan since the late 70's through '88, '89, when their economy, quote, unquote, "peeked" consumed a tremendous amount of old newspapers as more and more packaging, duplex board, recycled paperboard and newsprint machines went into place.

We are seeing more emphasis in manufacturing and mills shift to Southeast Asia because of the lower labor cost rates primarily, as well as perhaps a little bit more conducive attitude towards building paper mills. Korea, Taiwan, as well as Japan, of course, are getting just as "green," quote, unquote, as we are, and are facing the same effluent problems, pollution problems that many mills run into in the states.

Three areas that are barriers to old newspapers, some of which we overlap, of course, are, A, the printing inks. We're seeing new, a relatively new process in the flexigraphic printing, which is prevalent in San Francisco and in a couple of other areas in California, that are driving the mills absolutely crazy in the Far East.

Since they are having problems removing the ink, they are, therefore, contaminating their own product. That's probably more commercial and could be overcome by the big chemical companies, one would assume.

The next barrier is the ocean freights. We are dealing with a commodity obviously that is very low in value in old newspapers. It's supply and demand, but with the solid waste situation the way that it is around the county, as well as worldwide, with particular emphasis on Germany, France, Spain, even China, in April in the city of Chuong Yu, which used to be known as Canton, they have a 3,000 ton a day problem in their city of a just few million people.

It's becoming a bigger problem. But these ocean freights, of course, have wastepaper being, or paper stock being one of the four to five base commodities that fill the steamships up to go back to the Far East and other areas of the world, in some cases the ocean freight is literally 90 percent of the sale when quoting delivered to the customer in whatever port in Asia.

Could some dialogue from the state level be influential or assist in some of the lines in decreasing some of the freight rates, could be a good possibility. That's the second barrier.

Once again, like the other gentlemen on the panel, the quality is of paramount importance from the standpoint primarily of the MRFs or municipal collections. We have to take it back down to John Q Public, if you will.

We save old newspapers for the city and town like we used to and like we still do for the Boys Scouts and the church groups, but due to very low revenue, many of the independent collections from parties have all but stopped.

If you look at the public's idea of quality, they're going to put in the magazines, they're going to put in the cereal boxes, they're going to put in the plastic, and hopefully not, but they feel they are doing the right thing. More education must come.

You cannot look at a MRF facility in a commingled situation. Once you touch glass with paper or with plastic, if they are commingled, the quality of the municipally collected fiber around the country, and I've been to 60 or 70 facilities, versus what was once and still is sorted by the public or private, big or small secondary fiber dealer, your quality is becoming less and less and less.

It's very difficult for the mills overseas to realize to change their cleaning equipment, to spend a few more million dollars in economies, in Asia at the moment, that are just as bad as the economy is in the states.

MODERATOR HUSTON: Thank you, Bill.

We have perhaps covered most of question number one, whether we intended to or not. I would like to throw it open.

Are there any other barriers that anyone would like to mention? No? Yes?

I know that Bill had an opportunity to talk some about what we might do to overcome them. Are there any other suggestions based on the barriers that you identified or that Brian did or any of the panelists that you would like to comment on?

MR. COTTER: To follow-up on Bill's comment on education, educating the public and agencies about the overall environmental effects of using recycled commodities in the manufacturing process, again, bringing up the ideas of conservation of resources, both natural resources and landfill resources, energy savings, job development, some of that has been lost with the push of putting it in the container and it will be recycled and everything will be fine.

Some of the agencies that are overseeing the development or overseeing the permitting of the manufacturing facilities in the state could use a little attitude change towards these projects, seeing them more positively than alternatives to disposal. Many of the small scale businesses that want to be involved in using recycled materials in their manufacturing are being looked at as, well, you're going to open up another dump in the middle of the city, or transfer station, and you're going to bring garbage in there to make something out of it.

It would be helpful to educate what these materials really are.

MODERATOR HUSTON: Okay.

Harry.

MR. MILLER: Touching on that issue as well, I think we talk a lot about educating the public, but there is an element that we skip over. That's educating the municipalities and getting the word out beyond the industry so that the people that we're dealing with and licensing us and approving the projects know what we're talking about, too.

Specifically, dealing with glass and newsprint problems, I have run into this over and over again in the period of the last ten years in trying to set up recycling programs or discussing recycling programs, and I have had a great deal of difficulty conveniencing people that it was a real problem.

When you go into a wholly commingled collection system and you have glass and paper mixed together, you're always going to end up on the glass side. I worked in that industry for a number of years, and I wanted to say what is the problem with glass? Don't they have filters and screens to get the fibers out?

What I was told, and you guys can correct me if I'm wrong, once upon a time in making paper, you laid the paper pulp on a wire, literally made of wire mesh, and they changed that over to a synthetic fabric, and now it's a kind of a plastic that they're using to form the paper on, they lay this pulp on there.

Glass fibers are so minute that they get in there and degrade the wire at a rapid rate. If there is glass present, you get about half the life out of the wire that you would normally get without the glass being present.

The wire only lasts about six weeks anyway and costs about $30,000 to change it. If you cut the life in half, you've got a significant problem.

I can't seem to get this through to city councils when I talk to them, we I say, hey, guys, we can't do it commingled. We can't mix everything together and then separate it out.

We need to educate the people to make the decisions properly.

MODERATOR HUSTON: Thank you.

Anything else?

MR. DOUGLAS: One last point that I'll mention, too. This hits on the education of the public.

As you know the public is greatly influenced by the Federal Government. We recently had the Resource Recovery Conservation Act. I thought that was an excellent step forward as far as the procurement policy we have in the country to encourage people to start buying recycled goods.

As you have read, at least I have, the RCRA Act is becoming rapidly deflated. There is an obvious lack of interest or intent to follow its words as they are laid out. The point that I would make is, if we don't have the push by the Federal Government to encourage people to recycle and purchase the products, we will lose half the battle from the front.

MODERATOR HUSTON: Okay.

Would you come to the microphone and identify yourself, please.

MR. MEYERSON: My name is Bernie Meyerson. I'm a partner in a paper brokerage and recycling center.

I just wanted to make two observations. One, I think it would useful at this point to address the issue that ONP is not a single commodity but comprised of several grades used for several different things, and what is allowable varies depending on what market it's going into.

That sort of brings me to the second point. We are talking about education, there is a third element to that education, not just the city council and the generators, but it's also the processors.

The waste industry in general has not been terribly sensitive to the mill requirements or to peculiar mill requirements that are necessary to match a product with an end user. They have also tended to focus on collection economics rather than the processing side, which sometimes it's the collector that encourages the commingling because they view it as a more cost-effective way of collecting.

I see you shaking, but I know there are haulers out there.

MR. MILLER: We run three different systems.

MR. MEYERSON: I'm not saying they all do.

The point is that even where the paper is not commingled, it still might require some upgrading and alteration depending on the market demands. MRFs have to be designed to allow, just as with the secondary wastepaper industry, to allow for certain amount of in-house upgrading as well as educating the public.

MODERATOR HUSTON: Thank you, Bernie.

We will be seeing more of Bernie this afternoon when he sits up here and responds to question from those not sitting up here.

Any other comments from the public?

MR. BEST: Rick Best, with Californians Against Waste.

I'm really glad to see when Brian first initially listed the barriers, I thought one of the things that really should have been included was poor quality. When you get back, that may be one thing that you want to add.

I wanted to go back on what Bernie was saying in terms of the gradations, I assume that is going to be discussed in question four, but I would like to know what some of the problems are in terms of material that is contaminated through glass from commingling, is that material just simply landfilled at this point in California, or are there other markets, and to what extent of a problem has that been in California as far as quantity generated that is contaminated?

MODERATOR HUSTON: Does anybody want do address that question now or bring it up in four?

MR. COTTER: I can address it now.

First of all, Bernie is correct in saying there should probably have been some discussion of the various grades of newsprint. Without going through all the various grades, I will say that there are generally two distinctions.

One is very clean newsprint, number 8 news, that being used primarily by manufacturers who want to produce a newsprint product again, or a paper product that will be used as a paper product or writing paper or printing paper.

The rest of the news, which is 6, 7, 10, 2, dirty news, number 1 news, there are millions of different names that people use to identify what they have, is generally used in processes where that paper and its quality is hidden under layers of other qualities of paper.

Box board is a prime example of that, where there are layers of mixed waste paper and newsprint sandwiched between the outside layers of craft paper.

Those people that are going to initiate new programs and those people that are processors must be aware that the quality of product that they are producing today and sellable today may or may not be the quality product that they can produce tomorrow and sell tomorrow. Flexibility is very important in the collection and processing systems as well some knowledge of where they are selling to.

The reason that I say that we may run into more problems later is that a lot of the programs today, especially commingled programs, are selling their low grade newsprint to box board manufacturers. That market will probably become saturated. As more and more programs come on line, they will have to find markets other than that industry.

Most of the new demand for newsprints are newsprint manufacturing facilities because of the minimum content law. Those facilities will all demand very clean newsprint to be able to make newsprint from them.

Future demand is going to ask for cleaner and cleaner quality newsprint, not dirty quality newsprint. I think that's something that many of the people that are designing MRFs today are looking forward to, setting up programs and looking around at other people's programs and MRFs and saying, they are collecting it altogether and they are able to sell it.

San Francisco is a prime example. It sells 25,000 tons a year of newsprint that is heavily contaminated with junk mail and other material. It is going to a box board manufacturer. It always has. It's not a problem.

We sell this year in and year out. The price is reasonable. Some MRF operator says I'm jumping on that band wagon.

I think that's something that is going to hit home probably in the next three to five years, that many of these programs that are being set up to collect commingled are going to have to go back and re-educate people to separate the newsprint, completely separate newspaper from all their bottles and cans, or tremendous investments are going to have to be made on sorting facilities to upgrade the quality of the paper.

There are certain things that certain manufacturers cannot tolerate, whether it's news or high grade paper or whatever. Most of the public doesn't understand the dynamics.

Again, one of the educational things for the public, to the municipalities, to the private entrepreneur, having an understanding of really happens in the market place.

MODERATOR HUSTON: Thank you, Dan.

Any other comments?

MR. MILLER: Mr. Meyerson is absolutely right on the educating the operators of the various collection programs as to what is economical and what isn't and where you need know your system.

Between Tracy Disposal and California Waste Removal Systems, we operate three, essentially the three types of collection systems. One of which is fully commingled, automated.

One of which is a three-bin system, where the materials are separated to some degree and picked up separated. The other is a system where all materials are completely sorted at the curb.

The materials that are completely sorted at the curb are absolutely the cleanest. The one's that are fully commingled are absolutely the dirtiest.

We don't use that term. They have the lowest level of quality, let's say. It's taken me over a year to convince the owner of the company running the commingled system that he is actually economically ahead to do some sort separating rather than the commingled system.

His theory being that I have this high-priced driver out there running his truck, and it costs me more to pay him than it does some sorter on a line. You put ten sorters on a line, and they add up over what that one driver does real quick like. He has come around here over the course of the past year.

Knowing what you're selling and getting that point across to the mills is an excellent point. At one point in time I was selling white ledger in California to three different mills with three different criteria.

Look in the paper standards guide and it has a description of what white ledger is. One mill was very sensitive to staples and metals because they were making a food product.

Another mill was very sensitive to color because they were using the paper to create the top liner on their paper.

The third mill didn't care. I'm selling this grade of paper, but I have to watch the color going to one mill, I've got to watch the staples and paper clips going to another mill, and the third mill doesn't care.

They're all paying the same price for it. What do you do? You have to match the product to the mill and be aware of what they want. I agree with that statement.

MR. FORAN: I just would like to add that the Board has established as one of its market development goals the promoting the highest end use of secondary materials.

Certainly in the case of old newsprint, that would be going back into newsprint. Everything that has been said here about quality is what the Board is trying to promote, certainly meets the minimum content law for newsprint, reflects where the direction of market development is in the state, and that is recycling the product into its highest end use.

The comments are well-taken, and we will try to work with them somehow to see what the state can do to promote the quality issue, if, in fact, that is what we want to see the old news go back into a product which requires that high quality.

MODERATOR HUSTON: Thank you.

Move to question two. In question one we looked at the barriers, and perhaps some of the answers to question two will be very similar.

What are the greatest barriers for substituting old newsprint for virgin feedstock by existing virgin product manufacturers, and how could these barriers be overcome?

MR. NIELSEN: There are a couple of fairly large barriers. Be it domestically or internationally, you have to look at the end user of the product being manufactured.

I'll use as a domestic example, IBM for copy paper, I realize that we're talking newsprint, or let's use any of the big newspapers in Taiwan or Singapore or wherever in Asia.

What do they want to see? Since Asia has been supplied a lot of its end products from worldwide sources, Scandinavia, United States, Canada, South America, the Asian mentality, and we sell a lot of prime quality newsprint as well as converted, so we know pretty well they want it bright and white, so when it's printed in either multi-color or black and white or red and white, very common with the Chinese, it has got to stand out.

When we do look at a recycled sheet, and trying to sell a recycled newsprint, the end product, it's not that easy. It's a question of economics when it comes down to the end use.

Many fears are that they will not get the production that they can out of a stronger sheet, admittedly, of a virgin material. It's going to take -- in Japan the attitude has changed similar to our public's attitude and governmental attitude on secondary fiber, but we have not seen in any of the other countries on a large massive scale the push to use the recycled products that obviously we do see here.

Could the barriers be overcome? I think it's going to start at either a governmental level or a public level from the export scenario overseas to demand that they use a recycled newsprint.

You cannot pick up a paper where they are proud to say, as we are here, this material is made out of X-amount of percent of secondary fiber, be it old newspaper or whatever other grade.

In regards to packaging material, that's a totally different story. The growth from the packaging materials in places like China, Indonesia, and Southeast Asia is going very fast. As the products being produced, be it computers or toys, shifts around the various regions in Asia.

We will see more packaging increase as well as more sophisticated packaging come out of Korea and Taiwan to equalize how our packaging looks.

Asia needs secondary fiber. They consume a lot of virgin end products, but there is a tremendous amount of barriers aside from the end user saying I want it bright and white and beautiful, no specks, but we're dealing also with clients that are slowly coming around here domestically.

It's a change in the attitude to perhaps accepting a lower quality, perhaps it's even the same quality. A lot of it is psychological. Recycled, forget it.

Then you have to go in and try to do the sales job that the product will in fact perform equal to the virgin product.

MODERATOR HUSTON: Thank you. Harry.

MR. MILLER: This really isn't my area, per se. There are some comments that I would like to make.

In the substituting of secondary fiber for virgin stock, one of the prime problems that we had back when I was with Smurfit is the perception of the material being somewhat less quality than the virgin materials.

Smurfit Newsprint at that time was producing a commercially competitive sheet with virgin stock. The printers didn't believe it.

You's go into a newspaper and say this stuff has recycled -- oh, no. I have too many press room breaks, too many problems with it, and all this good stuff.

What a couple of enterprising company owners did was they just removed the labels or wrappers on the rolls of paper and had the printers run it.

Then they asked, how did you like it? Okay. That was recycled stuff. They got the point across to them.

It's just when you run secondary, you've got cleanliness problems. That's all there is to it.

The example that I use in the industry, in the paper mills, you have a highly technical term for a particular type of contamination from gum called a sticky. A sticky is a little piece of gum that goes all the way through the process and ends up on the finish paper.

A particular example is if you make box board or a box board product, and one of these stickies carries through and goes through the converter where they do the printing and everything, making cake boxes and all that jazz, I don't know why it is, but that sticky always ends up right in the middle of Betty Crocker's cheek when you print the thing. That's a problem.

MODERATOR HUSTON: Thank you.

Stu.

MR. DOUGLAS: My comments are brief.

There is a distinct complaint about me being in secondary fiber. They thought that I have, as the recycling effort begins to pick up more and more steam, and we are mandated to use more recycled products, the fibers are blended many, many times.

Another complaint that I'm beginning to hear from out in the manufacturing sector, will this continually drive the quality of our paper down if we use the same fibers over and over again?

If we increase the demand by manufacturers to pull the recycled paper out of the loop, say in my case where we take the insulation or custom fibers which is used as a blend, then we pull that bad fiber consistently out of the loop, increasing the amount of fresh pulp in the system.

If we do not encourage manufacturers like myself to purchase the product, then I think we will have a problem with the quality of the paper in twenty to thirty years rapidly declining in quality.

MODERATOR HUSTON: Thank you.

Dan.

MR. COTTER: Most of the barriers have been covered.

One that I add is that most of the existing virgin manufacturers of newsprint are far from urban areas, quote, "the urban forest" and freight is the biggest barrier for these mills to convert from using virgin pulp to use recycled pulp.

Most of the mills that are close enough to urban areas where it's economical to transport are converting. They are going to add recycled pulping capacity and make a sheet of 40 to 60 percent recycled content.

That means for us in California that our newest supplies or buyers are going to be in the Pacific

Northwest, Oregon and Washington, primarily. It's doubtful that we will see the mills in Canada far out in the woods convert from hundred percent virgin to recycled content.

Once the close-in facilities convert and buy as much recycled product as they want to buy and mix with the virgin, the demand is going to have to come from the new facilities.

MODERATOR HUSTON: Okay. Any questions or comments from the public?

Anybody?

Additional questions from the panel?

Okay. We'll move to question three.

What products or product groups presently manufactured with little or no old newsprint do you think represent the greatest potential markets for these materials?

Stu, we'll start with you.

MR. DOUGLAS: As you know, my answer is going to be fairly obvious with my background in construction.

The construction industry is notorious for eating up large quantities of wood products. At this time there is a push by most of the mills and manufacturers to start introducing the fibers into the stream so that we can start using some of these.

That's the reason I'm here today. I am a builder, and we have instituted the use of cellulose insulation in homes.

The quantity that the construction industry can use of recycled products is almost indefinite. It's so large, it's hard to calculate.

As far as particular products that you can see, you can start almost with the foundation up to the roof of residential or commercial package, any plywood, any studs, any sheer stock, exterior siding, cabinets, and on and on and on.

As I said, the possibilities are endless. It's just a question of somehow instigating a desire by the construction industry to utilize what we have here.

MODERATOR HUSTON: I would assume that your comments deal not only with old newsprint but mixed paper as well; is that right?

MR. DOUGLAS: Definitely.

As a builder, we look at ONP and OCC as wood, really just as ground wood product. Cellulose being is fiber, it's quite simple, we use it all the time now.

Anyone who has toured a construction site has noticed obviously a change in the material that we have been using for the last ten years. Whereas CDX plywood was quite common.

Now you're starting to see a lot of the particle board, chip board, OSP, replacing what had been standards all my life now with the new processed materials.

To answer your question, as I said, there are numerous products on any construction site that can utilize the recycled fibers.

MODERATOR HUSTON: One question specifically for you, if old newsprint prices went high enough, would you be able to substitute mixed paper?

MR. DOUGLAS: If my source rises in price, obviously the product selling does.

At what level are we not competitive with the comparable product, fiberglass insulation. We could take a rise at this time, yes, and still be competitive.

But is it indefinite? The answer is obviously no.

MODERATOR HUSTON: If mixed paper prices were low and old newsprint prices were high, would you be able to make a substitution?

MR. DOUGLAS: Yes.

That would be specific to the products that we manufacture now. I envision as time goes by particle board, plywood, stud and siding, numerous products can utilize the secondary fibers.

If we start to get into cosmetic areas, facing on the cabinets or whatnot, particular areas that are sensitive to being looked, you will not be able to substitute lower grades of fiber.

To answer the first question a little closer, it is really product specific on what type of grade we will be able to use. Some products, such as hydroseeding mulch, a factor of landscaping, can use almost any grade of paper.

As we get into the area where we need structural integrity, we have to be careful as to what type of grade we use.

At that point, we will want as fine a grade as possible and that costs more.

MODERATOR HUSTON: Okay.

Dan.

MR. COTTER: I will not get too much into the different uses for ONP. There are many. The insulation that Stu was talking about, animal bedding is another one that people promote as a large user of this, packaging products, et cetera.

I would like to bring up the thought that there is some promoting of cross-purposes of the Integrated Waste Management Board's policy for the highest use of recycled commodities to send special things like corrogated and newsprint and fine writing paper towards construction products.

Although they were used, they are used in a way that pulls them out of the loop for long periods of time, and probably puts them in a form that could never be taken back into the papermaking loop because of the glues and other things that will be used to bind the wood chips together to add the strength and integrity especially for construction materials.

There needs to be some thought to what is being promoted and what kinds of effects that it may have on the overall market.

Certainly the market place will answer some of those questions as the price for the higher quality fiber containing products is sought after by manufacturers that want to make more corrogated or newsprint or whatever, they will probably drive the price up to a level that people that are using it as a substitute for wood chips will convert to mixed wastepaper, but those are not sure bets.

That's something that I don't think anyone has thought about over the long haul, what kinds of effects promoting heavy use of paper fibers by the construction industry will have on the paper fiber in the using industry.

We are very successful in converting a lot of construction products to utilize paper. Will there be paper available for the paper industry that is under mandate to produce recycled paper?

MODERATOR HUSTON: Thank you.

Bill.

MR. NIELSEN: From the export scenario, a couple of the product groups that are primarily made out of virgin material would be the higher end packaging commodities. Things like pharmaceuticals and perfumes, for example, that are made usually from 100 percent virgin coated materials.

These are areas whereby, again, depending upon the end user, more and more recycled content could be used either by new developments, say a -- and this isn't out to the best of my knowledge yet, but a paper board machine that could make the same quality on both sides with a center layer or on a three-ply machine, inserting old newspapers and having coating on both of the sides.

There have been some projects looked at there but nothing has become reality.

In the Far East there still is a vast amount of areas, again, in the packaging field, whereby I think that a lot of the virgin solid beach board could be replaced. A lot of the other products are still made of secondary fiber, from printing and writing paper to newsprint mills.

Perhaps we could see a little bit more increase in Japan in their newsprint mills. They do buy a lot of chips and use wood chips from usually Canada and the Northwest to make their material.

Also, I think we could see more end uses in magazine paper or lightweight coated paper. We see a lot of this in Europe. We have not seen the technology. The mills are starting to a small degree here in the states, but we haven't seen the Scandanavian mill yet utilizing secondary fiber to make either super calendar or glazed paper, as they call it, or lightweight coated paper or magazine paper as they call it.

There were some projects being looked at in Arizona, but I don't think they will become a reality.

MODERATOR HUSTON: Thank you.

Harry.

MR. MILLER: Diverting fiber from a recycle to a reuse, we are are looking a little bit at definition here.

Reuse, you're taking the ONP and making building products with it. Recycled, you're using ONP and making ONP with it or making it into something that you can recycle, using it over and over again.

This is something that the environmental community has been vehemently opposed to reusing something, in other words, converting it in form, and they are very much in favor of recycling something, or reusing it over and over again.

I see people shaking their heads. That has been my experience. Rick from Californians Against Waste could refute or support me, whatever.

In doing the reuse, I'm foreseeing it going into building products because I would like to see the price go up.

In many instances, I think from what I see, it might be worth while to revisit the past. In the early 80's or late 70's, I was in a box board mill in Texas, in Dallas, that had an old building associated with it that they called the egg plant.

You can you go there and there are machines that had been there for, gosh, I don't know how long, but they were out of production for several years at that time. What they had been for was taking newspapers and making egg cartons. They were put out of business by the stryofoam people.

I think I see a little bit more of the paper being used in going back to making egg cartons. Revisit the past.

MODERATOR HUSTON: Okay. Any comments?

Bernie.

MR. MEYERSON: Two quick comments.

One comment is that if one barrier to encouraging the highest use is very often the nature of the contract that is developed between the public agency and the recycling entities, whether that be the waste hauler in the community.

If there is no built-in incentive for the waste hauler, or whoever the collector is, to maximize the value of the material that he is collecting, then there will be a tendency to take the easy route and slough it off in the lowest acceptable form to avoid the additional expense of upgrading.

One thing that has to be dealt with, public agencies have to be very aware of this and factor into their contractual arrangements this concept of encouraging the highest and best use of the material. That is one comment.

The other comment picks up a little bit on what Stuart Douglas said, that the nature of cellulose fiber is slightly different from metals and glass, the level of fiber degradation with each subsequent use, yes, other materials degrade, and there is always a slight loss, you never get 100 percent out of glass or metals, but the degradation is slower.

We can always expect or anticipate or plan for as desireable this combination of recycled contents with virgin use so that the fiber strain and yield remains high.

There are some buyers of OCC that do not want any of the OCC coming from Taiwan. They do not like the yellow box for a variety of reasons.

One reason is that the fiber yield from the boxes is quite low compared to other things. One reason why the material from the United States, why wastepaper from the United States is so valued is precisely because it has a high fiber yield and so much is virgin fiber.

We have to recognize the inherent limitations of cellulose as far as continued use.

MODERATOR HUSTON: Thank you. Any other comments?

MR. DOUGLAS: If I could expound on that a little bit.

One obvious result of the degradation of fibers that we see at the cellulose plant is the amount of dust in the air. The question that I have to the other panelists and people here in the room, and that is, ultimately what are the chances of using 100 percent recycled stock?

As I said earlier, the manufacturers that we have discussed this with, they encourage a blend of virgin and recycled paper because of the degradation of the fiber. As the fiber gets smaller and smaller, getting through the equipment, then there is a problem.

Any comments on that, I would love to hear.

MODERATOR HUSTON: I think that both Harry and Dan may have comments on that.

MR. COTTER: I'm not exactly sure what you're asking.

MR. DOUGLAS: What are the possibilities if we intend to go to 100 percent recycled ONP, is that a possibility, or is this a dream?

MR. COTTER: Well, there will always have to be injection of virgin fibers somewhere in the papermaking process to continue to make paper because the fibers will continue to break down.

If you close the system completely and try to use the same fiber stock to make recycled paper from, you would run out of fibers you could utilize. There will always be some injection of virgin fibers somewhere, either by having a paper that is only certain percentage recycled and certain percentage virgin, or 100 recycled paper that has a supply line that has 100 percent virgin paper in the supply line to continue to bring in the stronger fibers and longer fibers from the virgin in the production.

I don't think there is anybody in the paper stock industry that feels you can close the system and continue to recycle fibers without running out. You have to have some injection of virgin.

MR. DOUGLAS: Great.

One other question that I had, and I would love to hear some response, as Dan mentioned the fact that if somehow the construction industry were able to increase the demand and utilize the fibers in manufacturing of construction products, what is the possibility of that ever happening to completely deplete the source?

My thoughts on that is that the chances are really negligible. We have such an over abundance of ONP and other types of recycled paper. We would ultimately like to look at a benchmark where manufacturers like myself are pulling out of the loop permanently the degraded fiber which is being replaced by the virgin fibers to have a balance.

MODERATOR HUSTON: Any other thoughts?

MR. COTTER: Never say never. We do not know what is going to happen.

My point was not a fear that the construction industry would pull so much fiber out of the waste stream that there would be none available for the manufacturers of recycled paper products.

The point I was trying to make was that in promoting alternative uses for ONP, such as animal bedding, insulation, making wall board or construction products, whatever, is there may be some misleading of some of these industries, they see the price today, they see the over-abundance today, they say, great, we're going to get into this business and utilize this product.

I think that anybody who gets into that industry must realize that somewhere down the road with minimum content laws, especially in newsprint, you're going to have a large draw from newsprint manufacturers using recycled newsprint, are going to put tremendous pressure on the collection system to draw their supply.

It most likely will eliminate any low value uses of newsprint, like insulation, and some construction products. That means those groups are going to have to go after lower and lower quality paper to get supplies.

If you set up your system based on ONP and the price goes from $30 to $40 to $60 to $130 a ton, as insulators drove the price up 12 or 13 year ago when insulation became the hot thing to do, you find yourself in trouble.

The state would do a disservice by heavily promoting the use of ONP for all of these alternative uses without letting people know that they also are promoting a cross-purpose by saying we want minimum content newsprint, which means we want you to go use all of this stuff but, by the way, we're encouraging your competition very heavily on the other side.

I just want people to be aware that that is an issue. The market place is going to figure it out, but we should not mislead people as to what we're trying to do here.

Before we get off the subject, I should probably ask this about question two, Bill, the effects of the increase in recycled collection in the Far East, what kind of effect does that have on our ability to sell recycled products in the Far East?

I'm thinking back on an article in Fiber Trading three or four months ago, the domestic collectors in Taiwan wanted to stop all imports of wastepaper from the U.S. to protect their local collection.

Do you see that a trend, or what effect that may have in the future for us?

MR. NIELSEN: I think that the Japanese, as far as I can see in Japan, the Japanese collection rates are almost at the top. As the Japanese society gets more affluent and gets or is further removed from the old culture and into our, quote, unquote, "Western culture," people who even collect secondary fiber think it's not worth it any more, or too dirty a business to get into.

Korea has increased their collection. Taiwan, I remember four months agriculture they had a protest in Taipai, but I think that's caused more, not necessarily by the U.S. secondary fiber, although, blaming the U.S., the past year has seen massive quantities of Dutch and German, mainly mixed paper, ONP to a certain degree and their grade of corrogated which is lower than ours, go in very large quantities to Taiwan and Korea, thereby effecting the value usually on a negative scenario of our fiber.

This should continue because Germany is collecting 6.2 million tons and their consumption is about 5 million tons. So, they alone have a million tons.

It will not hinder us to a large degree because of the fact that the mills realize that the fiber value of the U.S. paper stock is still the highest in the world. The yield off the fiber, be it old newspaper or whatever grade, exceeds the yield of their domestic secondary fiber and European secondary fiber.

I see the increase, but it will not happen as fast, but we will see more and more increase for all grades of secondary fiber in Asia.

MODERATOR HUSTON: Is that yield greater for the U.S. because more of our fiber is virgin?

MR. NIELSEN: Yes, that's correct.

MR. COTTER: When we increase our production of recycled content paper, what is the scenario?

MR. NIELSEN: It will be taken care of as it has been in Europe when it comes to the coated papermakers who are some of the best in the world, chemical bonding agents, fillers into the paper of anywhere between 5 and 25 percent, that could suffice to make a sheet, a newsprint sheet, similar to that of a virgin. I do not see it as being a big deterent.

We have worked with chemical companies on certain problems in secondary fiber. My brother spent a lot of time, and a lot of these chemical companies do not know where to start.

Within the paper industry they have a wealth of knowledge, we find, but they do not know how to get in and reach the problem unless the problem is brought to them. They are not necessarily the typical chemical people that are involved on the day-to-day with the paper mills or have been in the paper business many, many years. We have found four or five big one's out there that said, yeah, we will try to solve wet strength problems.

We have been working ourselves with the flexigraphic ink problems. They have come up with a solution. It's a conservative industry. In the paper business, it's very difficult to change a papermaker. It's very difficult to change a pressman at a printing plant.

Very conservative industry. No, it doesn't work. Prove it to me. Lay it out type of scenario.

I do not foresee a problem for the next 20 years in regards to the degradation of the fiber. ONP could be recycled five to six times using 100 percent. Yes, fiber is going to get shorter, but the fillers or chemicals will rectify the situation.

MR. FORAN: One thing I wanted to share with

Stuart, to give you an idea of what kind of impact a mill like MacMillan Bloedel would make on demand here, and how it would effect market price, presently in-state demand for news is 377,000 tons a year. The MacMillan Bloedel mill in the first phase would consume 210,000 tons, which is well over half of what is already consumed in this state.

You could see what an immediate impact that would make at least in terms of market price. Availability, the material is always there for the price. It would change the economics of use for ONP for your type purposes.

The other thing I wanted to mention, the Smurfit Newsprint mill in Pomona does manufacture a 100 percent recycled sheet. It's the only major newsprint producer here on the West Coast that does make a 100 percent recycled sheet.

MODERATOR HUSTON: Let's take a break for ten minutes.

(Thereupon a brief recess was taken.)

MODERATOR HUSTON: Okay. We're going to get started again.

Question number four, we may have addressed some of the issues in this already. I know that Bill will be back momentarily. I think that Dan needs to leave for a few minutes and may not be here for the discussion.

Question number four, what are the most common and most detrimental quality-related problems with using old newsprint?

We have talked about these to some degree. If there is anything that any of the panelists would like to add to what has already been said, here's a good chance to do it.

MR. MILLER: I will pick up on it just real quick to say that I can't say it enough, the problem with ONP is glass.

Since more and more of the ONP is coming from curbside programs, those programs have to be developed in such a way to keep the glass out of the newspaper. It can be done.

Even in commingled systems, the newspaper can be kept separate. Some people are looking at putting it into fiberglass bags, and throwing that in with it and then it's later sorted.

We find in operating a commingled system that our greatest expense is separating the paper from the other recyclable commodities. If we can keep it separate to begin with, it reduces our sorting costs immensely, which makes the whole system a lot more feasible.

The other contaminants coming from the curbside are people tending to mix any trash with the material, somewhere along the way people, we have to educate people to realize that there are different kinds of paper.

Your envelope is not the same kind of paper as newspaper. Your cereal box is not the same kind of paper as your cardboard box.

There are identifiable grades of paper. Mixing them altogether creates a problem. Getting any of them in with newspaper also creates a problem.

Other than that, we have touched on a lot of the contamination issue.

MODERATOR HUSTON: Thank you.

Stu, anything to add?

MR. DOUGLAS: Yes.

I would say as far as my status as a manufacturer in utilizing the ONP, the quality related problems that I typically see, number one, is the moisture content, which would have to be addressed by the curbside recycling program.

When I purchase the ONP, obviously weight is a distinct factor. The product or ONP is coming into the facility and has been wetted by rain or the moisture condensation in the air, we end up paying a lot of hard money for water.

It's difficult for the machinery we use to process paper that is excessively wet.

The other two items that I mentioned earlier would be the factor of the inks that are used as well as the staples which are generally found with the inserts.

We have started to contact some of the local papers, ie., Sacramento Bee, to discuss this situation. We're going to proceed and push ahead as hard as possible so that the actual paper product arriving on-site at our plant is designed to be sent to that equipment.

I mention those items, the water, inks and metal staples all need to be addressed so that purchasers, as myself, can receive a product that is compatible with our equipment.

MODERATOR HUSTON: Thank you.

Bill, we're on question four, and some of these questions we have talked about, the quality-related issues.

If you have anything to add, please do.

MR. NIELSEN: No.

I can't foresee too many things in the quality-related problems that we find domestically are basically found in the Far East. Moisture is of utmost concern, being when old newspaper gets moisture, it has a tendency, depending on how long it's put in inventory to mildew, and mildew can never come out of the recycling process.

It's bothersome to any paper mill. The other one's would be almost the same as already discussed.

MR. DOUGLAS: I would like to reiterate what Harry mentioned earlier on the difference between the curbside programs considers versus other types of collection, commingled or whatnot.

The quality of paper that we see here in Sacramento which is derived from the curbside is much higher than anything we see from a MRF or commingled source. If Sacramento had gone to a MRF, per se, and we had any type of contaminants, we would not have located in this area.

It's very important to realize the difference in collection types, as one which will benefit a recycler and manufacturer and one which will not. I underline and approve the system that we have here in the Sacramento area.

MR. FORAN: I have a question for Harry.

With your experience in collecting ONP, what is the prevalence to stickies or self-adhesive labels on newsprint. It doesn't seem like there is that much of it.

When I picture your daily paper, I can't picture any stickies.

How big a problem is that in marketing?

MR. MILLER: It's a relatively large problem.

It doesn't come from the ONP. The stickies come from junk mail, with gum labels. They come from pressroom waste, with the tapes used to splice the paper together, and, in fact, in deinked news, there is one of the qualifiers in the paper status that says you will not have any pressroom waste in there.

I'll guarantee that everybody puts it in there if they have a paper handy to get it from. That's the main source of the sticky.

What happens, when that gum does get in there, it's not defacing Betty Crocker that's a big problem for the newsprint users, but what their problem is when the newsprint is formed and run across a series of dryers that are big rollers with steam running through them that actually dry out the pulp when you're in the process of making the paper, and you wind this thin newsprint altogther off the end of the machine.

Well, this glue is hot as it goes through there and comes off these steam rollers, and it adheres to the sheet above and below it. So, when it gets to the newspaper and they are trying to run it on the machine, it's cooled done and now it's adhered.

When it hits that point on the roll of paper, pop, it breaks it. It shuts them down on their high-speed presses. They don't like that at all.

Does that answer the question, Brian?

MODERATOR HUSTON: Any comments from the

audience?.

Bernie.

MR. MEYERSON: I just want to quickly mention, sunbleaching can be a problem.

Not so much with the collection but what happens after collection, particularly in some small locations where the paper is kept outside and unbailed for a long time.

The sunbleaching does degrade the fibers. It's specifically excluded in the standards.

The other thing is contamination with things like food oils and things if it comes in a mixed situation.

MODERATOR HUSTON: Okay. The next question, number five -- any other comments from the audience?

MR. FORAN: I had a question for Bernie.

You mentioned that the grade specifications specify that the pressroom waste, sunbleached paper is not allowed, are you referring to the PSI standards or is this another?

I don't recall seeing any reference to sunbleached paper or pressroom waste in the deinked news standards grading.

MR. MEYERSON: The sunbleaching is in the PSI.

MR. MILLER: Pressroom waste or over-issue paper is in PSI or whatever.

MODERATOR HUSTON: Okay. Question number five is one that I think we at the Board are particularly interested in.

What activities or programs would be most effective for us to pursue to assist ONP market development?

Are new government programs needed? If so, at what level?

Secondly, what can industry do to aid market development?

Bill, I would like to start with you on that one.

MR. NIELSEN: Since we have another ten or twelve hours, I guess I could -- what activities?

A couple of different ideas. The U.S. Agriculture Department in Washington, D.C., has a program called GS-7102. We have shipped overseas pulp to countries that are, who are financially unable to pay unusual commercial terms.

Ithe U.S. Government guarantees 98 percent of the receivable to the qualified exporter of goods X, Y, Z, thereby allowing payment terms to the end user. We don't see this too much in the Far East, but maybe in China and some of these areas, depending on the economies, where the client has between one and two years to pay back the receivable.

Where the commercial company or the exporter cannot withstand these terms, programs like this, we see in lumber, wood pulp, many are discussed while in Washington, D.C., we have a solid waste program, it seems to me that this type of concept could obviously perhaps spur on additional usage of the grade, if in fact one could offer a guaranteed longer payment terms, be it on a governmental to governmental level.

It's usually financed by an opening bank, usually the governmental banks as in the case of China. The majority of other countries are usually private, huge banking organizations, whereby the allowable payment terms or extended payment terms could perhaps be underwritten, and the program seems to work well.

This has to do with anything in agricultural and, of course, from Washington, D.C.'s level they consider forestry to be agriculture, everything from wheat, soybean all the way on down.

What else could -- I think, do we look at how can we best get to the public to educate them better as to the quality standards required. I guess it's not a large PR blitz, if you will, in regards to the different quality of old newspapers or subsequent -- I don't want to use the word advertisements, or subsequent news releases that the State of California has recycled X-amount more tons within a year after year period, using these quality standards and getting it in front, whether it's free newspaper publicity, I don't know.

Perhaps pointing out that the quality of fiber is of utmost importance to the end use, be it in newsprint or paper board or construction materials.

Are any new government programs needed and at what level? No.

We all agree that private industry does not like government mandating the industry. Our private industry in the United States, and I assume worldwide.

We have a solid waste problem. Paper, of course, I don't know, Brian, how much your department has looked into how secondary fiber degrades itself in the solid waste stream, but I believe that it does degrade itself in the "landfill," quote, unquote, so it does break out.

Aside from, we're just talking about old newspaper, but that will disintegrate. I know we're trying to solve a problem, and that is the solid waste problem.

No, I do not think there are -- the advent of the 40 percent recycled content came fast. It cost the mills millions and millions and tens of millions of dollars.

I try to look at two different sides of the story. Yes, everyone goes through good cycles, be it paper mills, banks or whatever industry we're looking at. It comes fast and seems to be working, and it is gobbling up more and more of the old newspaper that had been discarded in our trash cans, for all intents and purposes.

Yes, we do have too much of the commodity, but I think that the industries got to, we have to have better economic times. If we put another mill domestically, it hurts the industry more than helping it.

We're going to see more bankruptcies of perhaps public but private secondary fiber dealers that have been in business for a long time, and we will have to deal with that.

I don't think there is any more governmental programs. More and more usage. If we look at solid bleach board, if we get the end user, the perfume companies or pharmaceutical companies or the computer companies, as I was reading on the plane up, such as Apple Computer and Hewlett Packard who have now switched to unbleached cartons, but could we get the Revlon's of the world to say, yes, we'll use recycled, like Nabisco does.

They use recycled cartons for the Ritz crackers. Of course, that's enclosed in a bag. You get into the FDA situation, which they do have very stringent rules and regulations.

I just looked into it on making a recycled paper plate from old newspapers and magazines, but it had to be coated with a Patented coating that when food touched it, it would not do no harm to the person eating the food.

There are some other areas from the virgin packaging side in relation to old newspapers that could come into play.

MODERATOR HUSTON: You mentioned the U.S. Department of Agriculture program.

Do you know if that now applies to secondary?

MR. NIELSEN: It doesn't.

In our dialogue two years ago, we wrote a letter to the Acting Administrator, whether he's still in the position or not, I don't know, but they said, no, secondary fiber does not, it is already processed so it doesn't come under the agricultural scenario.

MODERATOR HUSTON: Thank you.

MR. FORAN: I wanted to exchange comments with Bill. I looked into the FDA issue as well.

It's a tough issue to understand because of the volumes of the regulations out there. From what I gather, there is no regulation prohibiting food contact with recycled content paper, whether pre or post consumer.

I can cite some products out there that have direct contact with food. Whether they are in violation of regulations or not, I can't say 100 percent for sure, but they continue to manufacture the products this way.

I use some of the products everyday.

MR. NIELSEN: But not when it comes to a hamburger.

In my study, done through law firms, not at our request but the Board's, where if the particle seeps through the coating, you can take a paper plate and put it on the shelves of the supermarket, for example, and say it was 100 recycled, which in Europe they are doing it, but if those two plates rub together and any type of metallic fiber comes through the coating or through the fiber, obviously it can have detrimental -- some people say they can make quality board where you can eat the board better than the food in some cases, but in the paper plate market, and paper cups, you could go on and on --

News would be a very good raw material in conjunction because it's a board type of material, but they were taking it down to the particles per billion, and to get with the FDA takes a long time, unless you have the right law firm working on your behalf.

MR. FORAN: I would like to exchange notes with you.

FDA has done some research and put out some reports that are understandable to the layperson regarding plastics in food contact applications. We should exchange notes on this.

MR. MILLER: I agree with Bill.

I get a little aprehensive when I hear someone say, I'm with the government, and I'm here to help you.

There are programs that I suppose could come about. There seems to be a difference of direction these days rather than looking for ways to regulate it looks like a big forum, such as this, are looking for ways to help.

It's to be commended. The whole attitude on the Integrated Waste Management Board since its formation is one of help rather than one of just regulation. I'll give you a kudo on that.

Programs that could be put in place would be anything to help educate the public, be it advertising or support, brochures, flyers to support, particularly the municipalities and their educational portion and SRRE and what have you. Give them as much as finances allowed to support them.

A standardized definition of materials, what we're trying to accomplish, to give them a better overview of the whole thing.

One thing that may or may not be of use, to my way of thinking, is to sponsor forums within industries. Some years back I spend some time, at Smurfit Newsprint, when I was on the collection side of the industry, we had a labor problem.

I worked at night with a lot of the fellows up there in the mill that were involved in the paper production end. It was the first time that the two divisions in the company came together and talked to each other.

A lot of the things that I was out doing in the field were actually detrimental to the mill, and I didn't know it. A lot of the things that the mill wanted, and they couldn't understand why we weren't doing it, we didn't know they wanted it.

They thought we were just being obstinate. But there were real reasons that we couldn't supply what they were asking for in some areas. So, there were some levels of communication there that did not seem to be crossed, and that was within one company.

Just sponsor forums and bring people together within the industry to share information and solve some of the problems. Just letting people know what the problems are because we don't know as well as we think we do.

MODERATOR HUSTON: Thank you.

MR. DOUGLAS: As far as activities to assist market development, as I mentioned earlier, I was bothered by the fact that the Federal Recovery Act was sunsetted so quickly, because I thought, particularly as a manufacturer, it had a tremendous benefit for people in my shoes which manufacture the recycled products.

So, possibly the state could take the lead from the Feds and mandate some type of a Recovery Act similar to RCRA so that percentages of recycled goods are not forced but encouraged to be purchased within the State of California.

As far as the issue of education, I think that goes hand in hand as far as with the industry or with state. The more people who are aware, the more they are going to be encouraged to purchase what they think is correct.

Those two items, I would say. Some type of a state mandated purchase program, as well an assist to the industry with advertising so that people are aware of the fact of what is available out there and at what price.

MODERATOR HUSTON: The state mandated, are you suggesting that for state agencies procurement?

MR. DOUGLAS: Yes.

Similar, as I said, take a lead from the Resource Conservation Recovery Act, and it could be set up in similar style.

Once that did hit the streets, I noticed a tremendous increase in demand.

MODERATOR HUSTON: Okay. Anything that any of you might have in terms of what industry can do for market development? Any ideas or comments?

I don't want to force an answer here if there isn't one.

MR. DOUGLAS: My point, as I mentioned, as part of our advertising budget, we are attempting to educate the architects, educate the contract associations and, therefore, educate the public on the benefits of using products made with manufactured items, in our case the recycled fibers.

It's pretty straightforward with us. The more educated the public is about the products that we sell, the more apt they are to purchase what we manufacture.

MODERATOR HUSTON: Thank you.

Any comments?

Bernie.

MR. MEYERSON: Just one quick comment on that, what industry can do, picking up on what Bill said about packaging, although I perceive it being rather difficult since a lot of paper companies are vertically integrated in forest products and have the virgin there, too.

It's been a general tendency in industry to let the end user pull, in other words, if the end user wants that virgin white box for the pharmaceutical, sure, whatever you want.

There is a great market value now in marketing green. But out there, my perception of it out there is that it's the end using company that is pulling with the green idea. They are going to the paper pills and saying, we want a box with recycled content. We want to switch.

I don't know whether you can actually get the paper company marketing people to encourage them to start marketing green. Maybe they would be interested in that.

That would help in terms of active marketing. In general, although it doesn't apply to news, but things like stickies, and I think Stuart pointed out, there is not a very good relationship between kind of paper products produced and their ultimate recyclability back into the loop.

Maybe there needs to be communication there between the product developers and the ultimate recyclability of the material.

MR. MILLER: A good example of the lack of communication, as you're talking about, dealing in Port Angeles with the company that makes the paper for telephone books, they put in a tremendous process there to handle the hot melt glue on the telephone books at the exact time that Pac Bell was going through a massive program of changing from hot melt glue over to water base glue.

The water base glue that they came up with at Pac Bell is not compatible with the system that they use. They crossed in the night.

MR. FORAN: This is the question for Bill Nielsen. You mentioned that there is a problem with the oversea mills, and I imagine with the domestic newsprint mills, with the flexigraphic inks, and you mentioned that likely it's a problem that the chemical manufacturers can handle.

My question to you is can we really expect that to happen in an appropriate time frame, or could the state assist in facilitating communication for the right hand to know what the left hand is doing?

MR. NIELSEN: We will see it, depending on the recycling process one has at the mill. Usually many people put in flotation systems versus washing systems versus washing and flotation.

The problem in regard to ONP is no more than at 10 percent of maximum at the moment printing in regards to volume, so it's not a large quantity, but a little bit spoils a lot when it comes to the recycling process.

It doesn't effect paper board. It just effects newsprint. In a year's period of time, we could see a solution to the problem.

I wouldn't think that -- I think that commercially it should solve itself.

MODERATOR HUSTON: Any other comments from the audience?

Question six, are the standard industry definitions for old newsprint adequate, or do you think that further refinement of these definitions is necessary?

This was clearly an issue with mixed paper, and we're wondering if there are similar concerns or improvement necessary for newsprint.

Bill.

MR. NIELSEN: When buying and selling any grade of secondary fiber, you have to have a basis with which to start, be it domestically or export.

We reviewed this at the Paper Stock Institute when we saw, three years ago, perhaps, the advent of the municipally collected news and the lowering of the quality, i.e., the increase of contamination that was being generated.

There is some thought to perhaps reclassifying a grade lower than PS No. 6, which is in essence board mill news, but it hasn't been put down or discussed. It may be discussed in November at the Paper Stock Institute's annual meeting in Florida.

One could look at it from the standpoint of each specification is different for each paper mill, so, therefore, the supplier would try to pack that grade. That's more to a one-to-one basis.

We need some sort of guidelines to trade around the world for the grades of paper. Realizing that the paper industry goes through its cycles, it's usually two to three years, depending upon the amount of tonnage being generated.

Obviously, municipally collected news is just massive. Before the industry gets around to providing a reasonably accurate definition that the source can package, we'll pack that quality, too.

No, I don't think -- it's being looked at, but in regards to news, I don't think that a further refinement of the definitions are necessary.

Now, you could have a hundred mill people in the room, each would fire their own, let's get rid of flexigraphic, I want the inserts out, the plastic bags are driving me crazy, and speaking about stickies, the Wall Street Journal, which the second largest printed paper in America, I guess, does have the sticky labels when it comes to everybody's office.

In the recycling process, as well as junk mail which is even larger, that does get in there and raises havoc. It is under study, but I don't think that a review of the definitions is necessary.

I'm speaking as a nation, as well as California, secondary fiber is coming from so many other states that you have to have some standards to base your quality on, otherwise you'll be fighting with every paper mill, fifteen paper mills in Korea, ten up here, and the claims, which are unfortunately inherent in our industry, would become more detrimental to the exporter than they already are.

MODERATOR HUSTON: You're saying that the standard definitions now give you a starting point, but you still need the one-on-one negotiation with your purchaser and your supplier.

That is the same thing as Harry said, he has three customers demanding the same thing, but each one has a different mix.

Anything to add, Harry?

MR. MILLER: I agree with Bill, 100 percent.

In fifteen years of buying and selling newspaper, I don't think that I have ever bought or sold any grade 7. I did 6 and 9.

The standards are there. Again, it's coming back to dealing with your customer and knowing what your customer wants. I think that Bernie will attest that grading paper is an art as opposed to a science anyway.

Essentially, the definitions as they stand are more than adequate. From my perspective as a collection program right now, I think one is plenty.

MODERATOR HUSTON: Okay. Stu.

MR. DOUGLAS: I feel that the grades that we have right now are adequate.

My only concern is that as time goes on and the curbside recycling programs have more and more effect, and receiving a percentage of recycled fiber that goes higher and higher, at some later date we may want to address that.

If we have paper that has a high recycled content in it, we are going to want to be aware of that so that we can deal with the dust problem as it rears its ugly head.

MR. FORAN: Bill, maybe you should mention the study that the Board's contracted on identifying recycled content through clinical means.

MODERATOR HUSTON: Gee, Brian, why don't you talk about that?

MR. FORAN: That's part of 1305, right?

As part of the auditing component of our minimum recycle content of newsprint law, we have contracted interstate to have our General Services Department determine whether they can identify recycled content.

There are means to do that. Maybe Bill knows more about it. There are processes to identify those.

MR. NIELSEN: There is some processes, but I think it would be the biggest nightmare in the world.

You want to do it from the source and the end user. If it's the LA Times, how much have you used?

If it's the source, you know how much. We've got the Green Cross, and the people have to stand to the pulpers, are you doing it?

I guess people are people, and people can fudge anything. If you have both the source and the end user, the printer of the material -- we have to give letters in our converting business, did you rewind recycle and ship it to printer X, Y, Z? Yes.

Or we'll get letters from the manufacturer, we hereby certify that it's recycled.

To chemically test every sheet, I wouldn't -- the industry itself has demanded such good high specifications, that a lot of the mills, you can take up 100 percent, 40 percent in a virgin sheet and lay them right down, there could be some difference, but in many cases there's not.

The biggest newspaper in the country demands this brightness, this opacity, and if you don't make it, then you don't supply them, and we buy a million and a half tons.

Obviously, the newsprint mills want the big end users under their belts.

MODERATOR HUSTON: Okay. Any comments from the audience?

Any comments on anything we have talked about today? Any reflections?

Any additional information, something that we missed? Open to the Board or open to the panel? Anybody?

Okay. I want to quickly summarize perhaps what we have covered today. We have identified, I think, a variety of barriers to not only the use but the substitution of secondary fibers for virgin fibers.

I am delighted that we were able to identify as many as we were. I think, also, we came up with a variety of different ways to overcome those barriers.

We were able to identify several quality-related problems. Stu, I think, throughout the morning was able -- not Stu, Harry -- would two just change places and make it easier for me -- identified that glass was a real problem, moisture, staples, ink, sunbleaching, food, the contaminants continue to be a problem.

I was very interested in the ideas that came forward on what the State can do, what we can do either, certainly not regulatory is what I heard the panel saying, but perhaps administratively and assistance-wise and information-wise helping with bringing groups together to talk about the problems rather than letting the problems be over here and solutions be over here and the communication, not bringing them together.

So, I was particularly interested in all of the comments today. Thank you so much for coming. Some came from near. Some came from far.

I'm delighted that you're here. I hope you continue to work in our process with us. Brian, within the next couple of months will be coming up with an action plan, and I know that he will share that with you before we take it forward to our Board.

If you have comments, please add them. If you have additional ideas, please send them to us or contact Brian or me. We would like, as we go through the action plan, as the Board picks specific activities that it will undertake, we would like to keep you in the loop, all of you, so that we can maintain the kind of communication, the problem-solving ability that we have as a State agency working directly with industry.

I am delighted that you were here this morning. If you have an opportunity, I would encourage you to participate this afternoon as well if your schedules permit that.

I would like to close this workshop. Be back here for the corrogated workshop at 1:30.

Thank you all.

(Thereupon the workshop was adjourned at 12:10 p.m.)

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CERTIFICATE OF SHORTHAND REPORTER

I, VICKI L. MEDEIROS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me, Vicki L. Medeiros, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this third day of November, 1992.

Vicki L. Medeiros

VICKI L. MEDEIROS
Certified Shorthand Reporter
License No. 7871

OLD CORROGATED CONTAINERS WORKSHOP

STATE OF CALIFORNIA

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

MARKET DEVELOPMENT WORKSHOP

--o0o--

COPY

BOARD ROOM

8800 CAL CENTER DRIVE

SACRAMENTO, CALIFORNIA

--o0o--

WEDNESDAY, SEPTEMBER 30, 1992

1:30 P.M.

--o0o--

Vicki L. Medeiros, C.S.R.
License No. 7871

APPEARANCES

WORKSHOP MODERATOR:

BILL HUSTON, Supervisor
Market Trends and Analysis Section

BRIAN FORAN, Staff
Market Trends and Analysis Section
Market Development Branch

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PROCEEDINGS

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MODERATOR HUSTON: I would like to welcome everybody back who obviously survived lunch, and we should conclude with our moment of silence for those who didn't.

I would like to welcome the new panel that we have for the second half of today's workshops. This session will cover old corrogated containers and cardboard.

As I mentioned this morning, my name is Bill Huston. I'm in charge of the Market Trends and Analysis Section in the Board's Market Development Branch. Basically, it's my staff that has prepared the Status Report on the materials that are being covered in these workshops, and will be responsible for preparing the action plans that follow each of the workshops and be reviewed by the Market Development Committee, either in November or December, depending upon the material in question.

Today's workshop will primarily focus on comments and suggestions from the public, and particularly from the panelists on what are the barriers to the use and substitution of old corrogated fibers for virgin fibers, and what are some of the alternatives, the opportunities, the projects that might be undertaken to overcome those barriers.

All of this will culminate in, as I mentioned, an action plan to be presented before the Market Development Committee in December, I believe the date is the tenth, to layout a variety of alternatives that the Board might consider to address the old corrogated cardboard market conditions.

Those will eventually be folded into a comprehensive plan, and the actions of other materials to set the direction for the Board's Market Development Program over the next eighteen months to two years.

So, I encourage everybody to continue to participate in our process. We want your input. We want your comments.

I know that Brian would be delighted to have your early review of both the action plan and any comments you might have on the Status Report. Stay involved.

Let us know where we're going astray, where we're making mistakes, where our analysis perhaps is missing some important information.

To begin today, I would like to remind everybody that there is a copy of the Status Report in the back of the room. There is also an Agenda for this afternoon's proceedings, and a list of the panelists with their addresses, and other information that Brian Foran of the staff has prepared to help guide today's discussions.

I'll quickly introduce the panelists, and then during the discussion of the very first question today ask each of them to perhaps augment a little bit the introduction that I have, and if they have some particular issue or some information that they would like to share before we get into the panel to do that.

Our first panelist is Chris Geyer. Welcome, Chris. Chris has been the Recycling Coordinator for Project Go, Incorporated, since February of 1991, which is a nonprofit community service agency in Rocklin.

Since 1988, Project Go has been recycling office paper in Placer and Sacramento Counties and provides collection services to over 350 clients.

I understand that Project Go was recently awarded a grant by the Western Regional Sanitation Landfill Authority to help educate the residents on the many requirements of AB-939. I'm looking forward to Chris's participation.

Next is Dick Johnston, who had an opportunity to come in a little bit early today, so he's been, perhaps, either sensitized or desensitized, depending upon his perspective of what may happen this afternoon.

Dick has been the Plant Manager at Jefferson Smurfit Corporation/Container Corporation of America's 100 percent Recycled Clay Coated Boxboard Mill since July of 1984. Prior to that assignment, he had a number of other responsibilities with that same corporation.

He has served the last two terms as the Chairman of the Southwestern Division of the Paper Industry Management Association, and we're looking forward to your comments as well, Dick.

One thing I failed to mention, and if I can, I wanted to let everyone know exactly what some of the reasons that we have invited these distinguished people to be here today, Chris Geyer is here basically to represent the private, nonprofit organization's perspective in the old corrogated industry.

Dick Johnston is here to represent the domestic mill perspective.

Our third panelist, for any of you who were here this morning. Bernie was nearly a panelist with us this morning, although he sat out front.

He's representing the foreign market perspective. He has extensive background in all aspects of secondary materials recovery and utilization.

He has been involved in brokering of secondary materials, industrial development using secondary fibers, in the design of collection programs, waste fiber supply analysis for businesses and planning and implementation of high grade wastepaper collection operations.

We're looking forward to Bernie's continuing involvement in the workshop today.

The fourth member is Steve Young. He looks far different than he does with a helmet on, and I appreciate that he has done that. Steve is here representing the wastepaper dealer, collection program perspective.

He is President of the Allan Company, which was established in 1963, and is currently one of the largest, independently owned newspaper firms in the nation, handling over half a million tons of wastepaper and other recyclables each year.

He is currently the Treasurer and Director of the California Wastepapers Dealers Association.

Welcome to you all. I would like at this point to introduce and call upon Brian Foran of our staff to present an overview of the Market Status Report that he's prepared, and also to acknowledge the fact that Brian is our expert on wastepaper markets.

It is his report that we are discussing in some detail today and will also be responsible for putting together the action plan as the next step of this process.

With that, Brian, it's all yours.

MR. FORAN: Thanks, Bill.

What I'm going to do is, for corrogated this afternoon, is similar to what I did this morning for old news. I'm going to try to paint a broad picture of the supply-demand status for old corrogated here in the state, and then briefly touch upon some of the barriers to market development, general market development barriers to wastepaper which have some special meaning to corrogated.

I'm going to follow the handout, which I have in the back of the room, the Background Sheet for Old Corrogated to discuss both supply and demand.

On the chart that you see overhead, there are actually two sets of data. The column on the left reflects OCC generation and recovery data that has been compiled from City and County Source Reduction Recycling Elements.

These represent presently about 85 percent of the population here in the state. The statistics that you see on the right are compiled by Jaako-Poyry Consulting as part of a market assessment study which has been contracted by the Board to R.W. Beck and Associates, and Jaako-Poyry, and I believe another consultant as well.

As you can see from the two statistics there is great desparity in the numbers, and I want to explain that a little bit.

First of all, for tons generated, which I refer to as potential supply of old corrogated in the state, I refer to it as potential supply, but, of course, in fact, there is realistic limitations to how much of any type of wastepaper can be recovered. It's potential supply but that is not to suggest that 100 percent of that would ever be available for recycling.

The American Paper Institute estimates the economically feasible recovery rate for OCC at around 60 percent. I think that might be conservative, but nonetheless, the figures that we come up with from the Source Reduction and Recycling Elements data show that we have a long way to go to get near that.

Let me explain some of the reasons for the desparity in the figures here. The tons generated in the Source Reduction Recycling Elements is simply a total of that which is disposed of, which is actually a result of waste composition studies performed by municipalities in tons recovered, which is also in part estimates because you cannot account for every ton of OCC recovered in the state, and often times this information is difficult to get.

Private wastepaper dealers are sometimes a little bit hesitant to part with that information.

The real desparity here is in the tons of corrogated generated. I really do not have an answer as to why there is such desparity there. That is something that we have to look into.

On account of the high generation figure, the recovery rate for -- that comes from the data from the Source Reduction Recycling Elements is very low from what had been previously estimated and what industry presently estimates is the recovery rate for corrogated in the state.

I don't really think that this is something that we need to focus too much attention on, other than how much market development effort is really required for corrogated. If we're at the 62 percent recovery rate, on the right column, then perhaps -- well, let me backtrack a bit.

It's significant in the sense that we need to know where to focus our market development efforts. If we are at 62 percent recovery rate, and it's estimated that we're approaching the maximum feasible recovery rate, maybe corrogated doesn't need that much attention, yet market prices, which I'll get into a little bit later here, would argue otherwise that corrogated markets are in need of development to at least make collection more economical for those municipalities and private businesses involved in that activity.

The big desparity, the other desparity in figures here is in tons recovered. You can see that the statistic from the Western States Study is nearly double that for tons recovered than is reported in the Source Reduction and Recycling Elements.

Part of that is explained by the fact that preconsumer double-lined craft is included in the OCC recovery statistics that Jaako-Poyry compiled. I'm fairly confident that those were not included in the Source Reduction and Recycling Elements statistics.

Whatever the case, it's hard to make a call as to where we are on recovery. I would be inclined to say that the true situation is a lot closer to what was found in the Western States Study, but there still needs to be some further research into that to determine just where we are at as a state of recovery for OCC.

The dispute as to where the demand is coming from for old corrogated, from the table here on the screen overhead, in-state mills here in California provide the large bulk of demand for old corrogated. It comes from a variety of sources, not just those plants that manufacture corrogated cardboard, that is the liner in the corrogated medium that goes into cardboard boxes, but a number of other types of board mills, such as recycled boxboard, construction materials and the like.

As I was saying, there is a fair number of different types of paper and paper board mills that do consume OCC. The table on the screen here shows just what a variety of those types of mills there are.

There are quite a few of them in the state. That is what accounts for our high in-state consumption of corrogated.

In addition to existing mills, there is consumption of OCC, that is the capacity to consume that, at recycled paper mills is growing at a pretty fast rate. I have put in here three projects, two of which have already come on line which have added considerable additional capacity to consume old corrogated here in the western states.

The two that have come on line are the Inland Container plant, in Ontario, and the Longview Fiber plant in Longview, Washington, which in fact does draw some corrogated from our state.

The one that is yet to come on line is the Weyerhauser plant in Springfield, Oregon, but when it does come on line, more likely in 1993 than this year, it will draw or provide demand for old corrogated generated in our state.

As I was saying before, although there is pretty good demand for corrogated, the prices that are paid to collectors for that material don't really reflect a very healthy demand right now.

Corrogated prices have dropped quite a bit in the last five years. Presently they are holding steady around the $40 to $45 range.

That's a price that a mill will pay to have that paper delivered. That is not including processing or transportation costs. $40 to $45 a ton does not come close to supporting the cost of collection and processing for corrogated. This is what underscores the need for market development for this material.

I will touch upon a few of the barriers to developing markets for OCC. This will be the focus of one of the questions which our panelists will be touching on.

For those of you who were here for the morning session, bear with me. It's going to be a repeat of what we heard for old news, because most of the barriers to wastepaper market development are pretty generic.

I'm going to make it short here. One of the barriers is the high cost of the equipment that is required to install recycling capacity. Those mills which have installed new recycling capacity have done so recognizing either -- to them there is an economic value in doing so.

The cost of the OCC is below the cost of procuring virgin fiber to produce corrogated containers or whatever their product is, that the corrogated provides an alternative fiber supply for. Nonetheless, that equipment is very expensive and does create barriers to additional capacity to consume OCC.

One of the things that the Board is considering in the Market Development strategy is provide financial incentives to consumers of wastepaper, including corrogated, to make this type -- to install this type of equipment a little bit more economically realistic.

High wastepaper transportation costs have been identified as a major barrier as well. The thing that we have identified as the best way to overcome that is to encourage mills to site closer to the source of the corrogated.

Here in California, we have quite a few mills as it is. We are not proposing to build new mills because there is limited demand for the end product, whether it's corrogated liner or medium or what have you that uses the OCC.

For newsprint was a realistic thing to try to site more mills in California. One of the other things that we can do to overcome the high transportation cost is to try to work with the Institute of Scrap Recycling Industries to deregulate rail transport of wastepaper.

The fact that wastepaper transport by rail is regulated creates considerable problems for those who want to ship material to mills. We do have a good number here.

If some of those barriers could be removed, it will mean more supply out here. I'm not sure how that works out in demand, but in some cases having the material there would perhaps increase -- I'm not sure how that would work.

Having more supply doesn't necessarily create demand. That's not what I'm saying. But it is a barrier to increasing consumption of more corrogated.

Another barrier that we identified to increase corrogated market development is the quality of the wastepaper. That certainly was an issue in our newspaper workshop this morning.

We'll find out from our panelists just how significant an issue that is with corrogated. I understand that some of the wax coatings, some of the adhesives used with corrogated are a problem at the mills, and Dick will address some of those issues.

What we suggest here at the Board to try overcome those barriers is to facilitate communication between the converters who are actually putting together the boxes with whatever materials they are using, whether it be the hot melt glue or whatever, and facilitating communication between them and the mills that are consuming the products, so that those generating the contaminants know that they are contaminants and maybe can find alternatives to those so that it's a more recyclable product.

Excessively stringent aesthetic standards have been a barrier to using at least 100 percent recycled corrogated because you don't get the white outer liner that you see on a corrogated box is typically virgin sheet, and I know that some of the major electronics firms, such as Hewlett Packard and Apple Computers have recently switched to all unbleached corrogated box for their products, which allows more recycled liner to be used in that corrogated box.

To the extent that we can encourage product manufacturers to relax their aesthetic standards somewhat, we can encourage reuse of recycled liners and boxes.

That's about it for the barriers that effect OCC demand. Let's get on with the panelists.

MODERATOR HUSTON: Thank you, Brian.

Any questions of the panelists regarding Brian's report or presentation?

MR. GEYER: I would just like to say one thing, having had the opportunity to serve on a number of cities SRRE Task Force, it doesn't surprise me one bit that they don't know what is going on.

You'd have one figure that is totally out of kilt of what is the reality. I'm sure that you find that throughout the reports. They did not ever have a handle on what was actually going on.

It was very difficult for them a lot of times to get that information from private industry, supermarkets, even buy back centers are less than forthright in providing that information. Like I said, it doesn't surprise me one bit that there's that wide gap between what could be perceived as reality and then city and county government's reports.

MR. FORAN: I just mentioned that the DOT issue may have contributed to that. It's more the inability of the municipalities to quantify the commercial generation that comes up short on the recovery end.

MR. YOUNG: We have two mills in California, and maybe three mills, that can make white K-liner from 100 percent recycled product, and they do it on a pretty regular basis.

They may be surcharging too much to prevent Apple from using it right now. Some prices are higher than the virgin.

MR. FORAN: Thanks for setting me straight on that.

MODERATOR HUSTON: Okay, anything else?

Anyone from the public who wants to comment?

Okay. I would move into the two-part first question, one, if the panelists would like to make an introductory comment of some sort, please do so; but the question that we want to get right into is question number one.

What are are the greatest barriers to expanding the use of corrogated containers by existing recycled product manufacturers, and how can these barriers best be overcome?

I would like to start with you, Chris, and we will move down the line.

MR. GEYER: I feel a little bit like one of the characters from the Wizard of Oz when the Wizard was saying to the scarecrow, here's your diploma, now you're smart.

I guess that now that I have something that says I'm on the panel, I'm now an expert, and want to tell you that I really appreciate that.

I would like to say that it's really good that the Board is giving a nonprofit an opportunity to state their case in this overall solid waste issue that we're currently facing.

Project Go has been collecting cardboard from clients for about two years. It's very difficult to continue to do that given the economic times. When you're looking at cardboard prices of $40 to $45 a ton, in reality, as a collector of cardboard, we're probably being paid anywhere from $28 to $35 a ton.

We estimate that it probably costs us to pick it up and handle it somewhere in the neighborhood of $35 to $40 a ton. That's picking it up, baling it and having it shipped.

It's real difficult to stay focused on the collection of cardboard. We feel very keenly that we must continue to give our clients in Placer and Sacramento County, where we're working, an opportunity to recycle this particular product.

An approach that we're trying to initiate, without a lot of success right now, is the opportunity to present to businesses, especially, the picture that they are going to save money in the long run by recycling cardboard versus having it continually go into the waste stream and the disposal cost.

As more and more city governments are getting serious about making sure that 939 is, the intent is fully developed in their communities, we're finding out that we are getting support along that line, and they are providing some support to us financially as well as in a marketing standpoint to keep the cardboard from going into the landfill.

Interestingly enough, the MRF operators, the two bidders in Placer County who are proposing to build a MRF, cardboard is one of the major elements that they are looking to get along with wastepaper.

I think it's a commodity that has a future. From a collecting standpoint, we're excited about being a part of that, especially if we can get some financial assistance. That's it.

MODERATOR HUSTON: Okay. Dick Johnston.

MR. JOHNSTON: I would like to offer upfront that we do have a hundred percent recycled paper board mill in Santa Clara.

Paperboard is different than cardboard because we're making essentially a substraight that will become a commercial box on a store shelf, such as a cereal or soap or tissue box.

I would like to make an offer upfront for anyone who hasn't seen that, we do take people through on tours. Actually seeing it live really helps kind of bring the whole picture together. It's one thing to talk about newspapers in a pile or bail, or corrogated, but when you see it go through the process and see something come out the other end, it makes the picture worth a thousand words.

We would be happy to entertain anybody who would like to come down see us. We do give tours.

The barriers, question one, the answer to question one is similar to the answers to several of these. We are up against in terms of the fact that we use old corrogated.

The limiting factors in our operation, which is true for a lot of the people that we compete with, is that we have aesthetics. I don't know how many of you take a close look at a cereal box. If the outside has blemishes in the printing, you, as a human being, will tend to draw the conclusion that if the outside doesn't look right, you won't pick up that box and buy it because it does give you the impression that maybe the inside contents are also somehow less than perfect.

If you're in a medium such as ours where the greatest advertising vehicle for our end use customer is the printed carton, and if that carton doesn't look good, you, the consumer, and myself included, will not buy the carton.

The aesthetics issue is a really tough one to get over. This is a double-edged sword. We now have customers that want us to make the inside of the box or what we call the back liner look dirtier so that the consumer is sure it's recycled.

Don't mess up the face where they print, but when they open up the box they want to be sure it looks recycled. An interesting challenge for us to undertake. So, we have the aesthetics issue.

OCC, our single problem, and it's true of anyone who uses it, is the level of contamination. Brian and I had this discussion before. It's what will come up under number four.

Wax and hot melt glues are very, very difficult to handle. OCC, those are two very common contaminants. There are lots of others, but those jump out.

In dealing with the ability to deal with contaminants, the only way that is acceptable to date is, one, to literally hand sort, which is extremely expensive when you look at labor costs, or put in many millions of dollars in capital and equipment to clean to go after those contaminants.

That's the barrier that we face.

MODERATOR HUSTON: Okay. Dick, does your company now use 100 percent recycled feedstock, or do you use some virgin as well.

MR. JOHNSTON: Our mill was first built in 1957. It has always been 100 percent recycled. We never had any pulping capacity. We never used any wood products.

We do buy what is listed in your literature as pulb subs, for our top liner, the surface that we will put the coating on so that the printer has a nice white substraight to print on.

Predominantly, our sheet is made up of 50 percent post consumer. We deal with OCC as one of the fibers that we deal with on a regular basis.

MODERATOR HUSTON: Does your source of OCC basically come from curbside, or is it more controlled than that?

MR. JOHNSTON: It's more controlled.

Our current supply source, we have two suppliers. For us, it's very unusual.

Most recycle mills have multiple suppliers of wastepaper, because there aren't many generating sites that can generate enough material to supply even a small paper mill.

In the case of OCC, we have one store that knows the quality level that we need, which really means that they try to keep the wax cartons out of our OCC. We buy pretty much hand-picked store OCC bales.

We also have a small local recycler that has a number of commercial accounts in the area that has his own little forklift and pickup truck, and goes around and picks up those bales, and we know the quality of his material.

Based on the quality level that those two suppliers give us, that allows us to use OCC as a feedstock.

MODERATOR HUSTON: Thank you.

Bernie Meyerson.

MR. MEYERSON: When looking at OCC from an export perspective, I would say right now that the biggest barrier to shipment is the general state of the world economy.

OCC is a especially sensitive to macro economic conditions, particularly consumer, consumer spending and consumer consumption both abroad and here in the United States.

One of the reasons that we ship a lot of OCC to Asian markets is so that they can send back their CDs and TVs, and all the other things they sell to us in boxes.

When that market is diminished, as it is now, the demand is diminished significantly. One other major barrier to any export of wastepaper to the Pacific Rim, as was mentioned this morning, is the cost of freight. Even though OCC is more valuable than ONP, it nevertheless is still the situation where in most instances you're paying more for freight than you are for the paper.

But I want to add one more factor, that it's not just the cost of the freight, but the availability of shipping containers is a very uneven situation, because whenever a shipping company has more valuable material to ship abroad, they are quick to deny the containers to the wastepaper industry.

That's being partially mitigated now by the growing interest in bulk shipping. OCC is especially amenable to that because it packs into a good bale.

Finally, as a barrier, I will talk about the baling situation itself. One barrier to the export of OCC on the part of a lot of medium size wastepaper dealers or generators is that they do not have baling equipment that makes a sufficiently compact and heavy bale to meet the weight standards required for export.

Essentially, by their equipment have left themselves out of the export market.

I will start with those.

MODERATOR HUSTON: The lack of the baling equipment, is that because it's extremely costly or because the equipment doesn't exist?

MR. MEYERSON: The equipment exists, but the high compression balers are fairly costly in most instances.

It's been my experience that a lot of people that get into the business, and may even generate -- I'm not talking about wastepaper dealers particularly, but maybe a waste hauling company that wants to get more seriously into the business of OCC generation, do not think about it in those terms.

They sort of respond to a baler salesman who may or may not bring up that issue. They just sort of back into the wrong kind of baler. I don't think it's so much a conscious decision on their part as much as a lack of information and lack of understanding that you have to be able to get certain weights into a 40-yard container in order to make it viable.

MR. FORAN: Bernie, I have a question.

How does shipping break bulk help overcome the problem of the high freight cost? Is it that more can actually be shipped that way than if you put it in a container?

MR. MEYERSON: The idea of break bulk is coming back simply because, well, for a couple of reasons -- one is that the industry doesn't want to be held to ransom by the container companies that arbitrarily cut container availability off when it suits them, or ups the container rate.

There was a time earlier this year when the container rates were going up weekly. When you make overseas arrangements to market something, you accept the price overseas, and by the time you finish the shipment, you might be paying substantially more for shipping, and you end up having to eat it.

MR. FORAN: You avoid the container cost by shipping break bulk?

MR. MEYERSON: Yes.

There have been some technological advances in the ability to load large number of bales simultaneously in a way that respects their integrity and minimizes the handling.

You have to be able do it so that it can be loaded and off loaded in a reasonable period of time. The demurrage on a ship is something like $10,000 a day. So, if you take too long to off load it on the other end, and have to pay 10,000 a day, you eat up any value very quickly.

There are a number of problems still associated with it, the least of which are difficulties with longshoreman costs and handling costs at American ports, but it's something that is growing.

Maybe Steve can talk about it in a moment or two.

MODERATOR HUSTON: Okay. Thank you.

Finally, Steve Young.

MR. YOUNG: Just to add to Bernie's comments, current westbound sailing rate is about 70 percent, and the shipping lines have just announced a $3 bunker fuel adjustment charge.

This is rather a strange incident. The oil prices are actually dropping slightly. They have gone up.

One problem we have in the ocean shipping business is that we have every line talking to every other line, and they have exemption from anti-trust. Even the non conference lines have set up an independent body to negotiate with the conference now, and, of course, they are agreeing to fix the rates.

Normally when we saw 70 percent sailing westbound, we would see a decline in rates and expect the money on the table as high as you wanted to, and the rates would come down. They have not dropped at all. Maybe slightly in two or three areas.

The one thing that is forcing rates down is when the steamship companies start to lose a major share of their business to break bulk. Our constraints to that are the fact that our loading costs are about three times what they are on the East Coast.

Maybe the California Integrated Waste Management Board would want to make a study of why our costs are different and find a way to adjust those costs to a proper level so that we can be a competitive break bulk shippers.

Let's talk about question at hand, what are the greatest barriers to expanding the use of OCC by existing recycling paper mills. I would say that the markets are a big constraint.

The wallboard mills are running mostly on 10-4 schedules. The State should look at some form of subsidy to keep those mills running 100 percent. If that means freight subsidy to make additional product, such as liner board or craft medium, and most of them can do that, not with the same high production capacity that they make wallboard paper, but very close to it.

It would make one of our utilizers full capacity. They are used to using secondary fiber. It's all they use. Making wallboard for export and some sort of freight subsidy to make it competitive with the Europeans who at one point in time had free fiber supply.

Power costs are another problem for the paper mills. If you do not have co-generation at your paper mill, your power cost can be three or four times the nearest competitors.

Some of the paper mills currently in existence do not have co-generation. The are uncompetitive in certain areas, which also reduces their running time.

Water supply, the biggest thing to water supply of course is recycled water systems. This is a monetary constraint because they're very expensive. It means settling ponds, additional land, cleaning equipment for the water, and maybe the State could look at subsidizing some of these for the existing mills that do not have them.

Sewage treatment, certain mills in certain areas are charged an enormous sewage charge to dispose of their waste water. Perhaps some adjustment or allowance could be made in this to allow these mills to operate without this tremendous surcharge.

Raw material supply, there has to be a good raw material supply that is fairly priced, available and of a quality that the paper mill can use.

I think we have all those things in California right now. Our recovery rate on OCC is approaching probably pretty close to the maximum. I do not agree with the 62 percent figure. I think it's more in the 72 percent range, and might be in the 82 percent range.

Money is another problem. Some of the mills in California are in serious financial difficulty. They are secrets. They are public companies. US Gypsum and Gaylord both are struggling at the present time.

We have a mill in California that is shutdown. It would take $150 million to reconstruct it and get it running. It's a prime target for a recycle mill.

A lot of our paper mills have machine constraints. They can't switch grades very well. They can't make certain grades. Perhaps there could be low interest loans to make them more competitive.

Our general economic picture doesn't lend well for our wallboard mills and it will not lend well in the future for our medium or liner mills. We have to improve the general economic picture.

The market picture is improving. The public is accepting recycled paper board and recycled boxboard and demanding it. The larger consumers, the breweries, the food producers are all demanding that it be recycled board.

Twenty years ago in this country when the economic condition declined, the demand for virgin board would shoot through the roof and the recycle people would all take down time. It's exactly the opposite of what is occurring today.

The people taking the down time are the virgin producers, which is forcing them to put in recycling systems. Despite us being critical of the government, they are doing a job of forcing these people into the recycle business.

MODERATOR HUSTON: Okay. Thank you.

Any comments or questions from the other panelists regarding what you have heard?

MR. JOHNSTON: I would just like to add one thing.

It might be intuitively obvious for a lot of us, but if you look at wastepaper, you have looked at mixed paper, news and now we're talking about corrogated, corrogated is unique in the fact that because the fluted medium in every corrogated box is there for structural strength, it also makes it a very uncompressable material.

When we look at moving that material, it's very difficult to get weights. I have a couple of guys to my left here that could probably give you exact numbers, but our experience at our mill is that an 800-pound bale of corrogated, the exact same bale in almost any other paper fiber is about 1200 pounds.

As far as weight and shipping, it becomes a big issue with the cost of moving the material. You can fill up a truck and not meet weight, and fill up a container but not make weight just because corrogated is very hard to compress to meet those weights.

That is something to factor into this.

MR. YOUNG: When you begin to collect corrogated in loose and roll off boxes, you soon learn that your roll off collection costs run about $50 a ton loose, and that means that you average about two tons a box, and it generally costs $100 per container to pick a box up.

Baling or running through a wastepaper plant is between $30 and $40 a ton, depending upon landing cost, building cost, and the size of the facility and how well the material is produced through the facility.

The cost of producing a ton of corrogated a day is probably in the neighborhood of $70 or $80 a ton, if you go and pick it up from the commercial account.

In the market where we're receiving $55 or $60 a ton for the material, that's pretty uneconomic to do it over a long period of time.

MR. MEYERSON: I would like to pick up on that and say that one of the underlying implications of what Dick and Steve have just said is that for this material almost more than any other paper grade, the continued health of what we call the informal sector is absolutely vital to bringing in the incremental tonnage of OCC, especially in loose form, precisely because it's uneconomic in any institutionalized sense, and probably even for the informal sector collector if he really charged what all his costs and his labor, the way other people have, he would probably find that it's not very cost effective either.

He does it, nevertheless. One of the things that I'm saying, there is a lot of movement out in the public and public agencies to really stamp down on scavenging or that kind of thing.

For formal programs, it's important to keep in mind, especially for this material, that the informal sector provides an absolutely vital service.

MR. YOUNG: At an enormous savings to the taxpayer.

MODERATOR HUSTON: Thank you.

Any comments?

MR. FORAN: I have a question for Steve.

You mentioned that a mill had recently closed down and it would take $150 million to get it going. Which mill is that that you're referring to?

MR. YOUNG: That's the Fiberboard Mill, associated with Gaylord Container. They actually paid $240 million for the mill and ran it about nine months, and shut it down because it was losing about $35 million a month.

MR. FORAN: Which city is that mill located?

MR. YOUNG: Antioch, California.

MR. MEYERSON: They technically did some work to integrate those two mills back when they acquired them, but they are in a sense separate entities.

MR. YOUNG: The original idea was to cross-pulp virgin material into the recycled Gaylord mill in Antioch and eliminate the chip need and save $30 a ton. The machine size on the Fiberboard side is the wrong size and ended up with a bad trim, not designed for the market now. You have to make a machine change and get away from the wood chips because they are expensive.

You would want to convert to recycle. There are EPA and other conditions that have to be met.

MR. FORAN: That mill had been -- they were using OCC and wastepaper?

MR. YOUNG: As Bernie said, they were a large user of wood waste for their hop-fuel boiler.

MR. MEYERSON: The OCC is used on the other side.

MR. YOUNG: They used OCC in a small amount for their medium machine as well.

MODERATOR HUSTON: Okay. Any comments from the audience?

Any questions?

MR. MEYERSON: Just one quick side-bar comment, I think the chances of getting a new mill sited at that location are zero to minus four.

MODERATOR HUSTON: Okay. Question number two, what are the greatest barriers to substituting old corrogated for virgin feedstock by existing virgin product manufacturers, and how can these barriers best be overcome?

Steve, let's start with you.

MR. YOUNG: Part of the problem if you're a virgin user making liner board or medium, you are generally out of the state.

We don't think we have one virgin producer located within the state which means freight-wise you're $35 to $40 a ton away, either from the San Francisco or Los Angeles area.

You immediately have a corrogated cost delivered to your mill somewhere between $80 and $95, depending upon what the freight situation is. That is a constraint but not an absolute deterent.

The next thing that's a deterent is the fact that you've got to have a cleaning system in order to utilize that old corrogated. A cleaning system today for 500 tons is roughly $25, $30 million, $40 million. They are reluctant to make those investments, so they go unmade.

Today, we're having a slight change in that scenario because the demand for recycled board is forcing these mills to make that change. When you have a mill that is valued at $300 million or $400 million and you talk about another $30 or $40 million to keep it active, sales wise, it's not much of an investment.

Machine constraints, a lot of machines are not capable of running old corrogated, or not capable of handling what comes across the machine even after it's cleaned.

Most virgin producers have a huge investment in woodlands. What comes from the woodlands is lumber and the byproduct called wood chips. The paper is primarily made from this byproduct of wood chips.

So, they have a problem. What are they going to do with the wood chips if they turn around and use OCC to produce the liner board or medium? They have generally a commitment to purchase that wood chip material.

Those are the main constraints that I see.

MODERATOR HUSTON: Do you have some suggestions as to how to overcome those?.

MR. YOUNG: A simple suggestion, demand at your Board that you buy your goods and be recycled and you force them right into the scene.

MODERATOR HUSTON: Are you suggesting minimum content requirements or requirements, for example, that the State buy product that has recycled content in it?

MR. YOUNG: Surprisingly, we're doing it today without any minimum recycled content legislation.

The big consumers of boxes are demanding recycled containers, and those include the food and beverage companies.

Everybody who uses ten to twenty truckloads a day of old boxes is demanding that they be at least 15, 20, 75 percent recycled. They like it even if it says 100 percent recycled. It's a great benefit.

MODERATOR HUSTON: Thank you.

Bernie.

MR. MEYERSON: I think at this point, I think generally the demand for U.S. OCC overseas, when there is a demand for OCC, is very high because we have probably the finest OCC in the world, in terms of fiber content.

But, I would like to point out here, in terms of something that might still happen here in California, is that the potential Daishowa 100 percent recycle liner board and medium mill in Stockton is not a dead issue by any means.

It may be somewhat delayed, but I think it's still being actively considered by Daishowa. That would have, of course, a substantial impact on demand especially here in Northern California.

MODERATOR HUSTON: Thank you.

Dick.

MR. JOHNSTON: You have heard some pretty good statistics and reasons why the virgin issue is probably not as prevalent in California as it might be elsewhere.

We do have a window of opportunity, though, by the year 1995, the same people that have helped on some of the surveys that the Board has had done have also done a survey on the OCC market, believe that by 1995 the South, the West, Mexico and Canada will all be net importers of OCC is great.

There physically is not enough being generated in this area to support our own means, and, of course, export is one of those needs. We have to meet the export demand.

In the back of the room, the article that was laid out was very true that Franklin Associates did that particular survey said that really our opportunities are in the residents, small business and office is where OCC can come from.

How do you do it economically? You have heard some good reasons why it's hard to get that material collected and picked up without breaking the bank, so to speak and putting someone out of business.

I think our barrier issue is, I think we should try to to hit those markets because, as most people up here are aware, there is not a major super market that I know of in the State of California that doesn't already have their contract with a major wastepaper broker. Every bale, every piece of corrogated that comes out of those super markets is already being sent someplace, whether exported to a mill in California or possibly in the case of Weyerhauser and some others, to mills north or south of us or into Mexico.

We have the opportunity now to try to develop this, and it's a way to generate, plus it cuts down on landfill.

I don't see the virgin, there is no virgin mill in California because when that mill at Antioch shut down, they were the last one that was really a virgin mill. They did have a small recycle system for OCC.

How can we help people like my partner on the right, Chris here, come up with an economical means to keep the corrogated out of the landfill and get it to the people who want to use it?

MODERATOR HUSTON: I guess what I'm hearing you say is that there is likely to be a demand if we can produce the quality and quantities that is there?

MR. JOHNSTON: The thing that you have to look at now is the amount the south, southeast, has historically been the haven for virgin liner and medium, the figures used were for brown fiber.

Almost every one of those mills has some sort of recycling program that they are going on with. Unfortunately, the south doesn't have the capacity to generate the amount of corrogated material they're going to need.

There are mills capable of recycling that continue to be either upgraded or built in New Mexico. Changes in the northwest where there has been virgin corrogated, virgin craft mills that are now getting into corrogated, we are going to be into an inbalance.

Right now we might have a very low price on OCC. I think it's only a question of a few years that we'll go from a low price and apparent glut to a situation where the price will shoot up, if we can develop an infrastructure that collects it, and then our collection rate will stay up and people will do well on the economic side, too.

Short term, everyone looks at $40 a ton, and says, geez, I'll lose my shirt if I get into that. It's hard to see past today's economics bad.

In a few years we could all be saying why didn't we collect corrogated a couple of years ago because I could make a killing if I had a waste yard full of it. Those times have come.

The export market right now is extremely soft, and I think both of these gentlemen will agree that export is soft. If you look at 1987, your high year, I had to buy wastepaper in that market. When the export guys come to town, you might as well let them have all they want because they are going to outbid you. Price is not an issue. If they want it, they get the material.

We're not competing as a domestic, we're not competing right now because there's not enough strong demand.

MODERATOR HUSTON: Thank you.

Chris.

MR. GEYER: I would like to second what Dick said.

It's important for collection agencies to continue to look to the future. The way that we're trying to do it at Project Go, as a nonprofit that is struggling with the $35 or $40 per ton, is involve the clients or business, it's important for them to realize that there is a cost savings that is attached to recycling cardboard.

As important as it is to collect the cardboard, we need to educate the business section or business clientele in our communities that it's absolutely the right thing to be doing.

Eventually, if we get to the point to get close to break even, as Dick said, in a couple of years, I think it's going to be a profitable market.

I would also like to second what Steve said, the single most important aspect over all of it is demand, demand, demand, and whenever possible, we need, as consumers, to make sure of that.

I think that's where the State needs to take a real proactive role, making sure that we're demanding that it's recycled material that we're using.

MODERATOR HUSTON: Thank you.

Steve.

MR. YOUNG: To augment what Dick said, in the Southeast, by the end of 1992 we're going to gain one million tons of OCC recycling capacity.

The following mills will be in full operation, Stone Container in Florida with half a million tons, Inland Container, Kentucky, 150,000, the one in Valiant, Oklahoma 150,000, plus, and Union Camp and various mills throughout the Southeast, plus 200,000.

I'm not going to be as conservative as Dick is in predicting an increase in the price of OCC. My feeling is that he's going to have a tough time buying OCC in January. It's going to force the entire Far East Basin market to the West Coast for supply, because these mills are going to need to reach up into New York and Boston where their traditional export has been moving from, and secure that tonnage.

Quite the contrary, when a domestic mill wants it, they get it over the export mill, generally. They have a much bigger ability to pay.

It's going to be a struggle because they're bringing on a little too much capacity all at one time.

MODERATOR HUSTON: Any comments or questions from the audience?

Question number three, what product or product groups presently manufactured with little or no corrogated do you think represent the greatest potential markets for this material?

Dick, we'll start with you.

MR. JOHNSTON: As long as the American public is enamored with Price Club and Costco and all the other kind of discount marketing, you'll notice that there has been a shift in the consumer packaging to bulk cereal and those things that are very, very attractive to the people in corrogated.

We have watched a lot of material that was in paperboard move from paperboard to corrogated just because it becomes a weight factor. If you have enough weight, enough bulk, then you're going to you see the transition.

I would say overall corrogated is a market that has done very well. It's a mature market but one that happens to be a packaging of choice in many, many cases.

MODERATOR HUSTON: You basically see an expansion because of consumer preference for more corrogated containers?

MR. JOHNSTON: It certainly appears to be.

That's what all the people who have built the mills that Steve just mentioned are hoping at least.

MR. GEYER: I agree.

It's sort of being driven by consumers. This is an industry that is going to respond, unlike the plastic industry.

From Project Go's standpoint, we are encouraging our consumers that participate in our collection programs and just in the public education aspect that whenever possible to switch from items like plastic that are not easily recycled to paperboard and cardboard items.

I think as consumers become more aware of the opportunities that are out there for paperboard and cardboard, it's going to increase the demands, hopefully.

MODERATOR HUSTON: Bernie.

MR. MEYERSON: I don't have much to add to that.

I think that is also true of the overseas user. I think there is quite a bit of recycled content already in the overseas packaging, but just to the extent that there isn't, just increasing green awareness will probably result in more use of the recycled material.

The only other thing is the shift of maybe back to paper products more than plastics, let's say one thing that we talked about at lunch, were the structured members of multilayers of a carton, like a pallet, you may see more of that.

That's about all.

MODERATOR HUSTON: Okay.

Steve.

MR. YOUNG: I would say the biggest potential use other than what we currently have is probably in tissue products, that being industrial toweling.

We've had three mills in the last nine months switch over to brown generic toweling. They are making both a household towel and gas station towel or restaurant towel. It's brown in color and made from OCC.

The usage is high. Fort Howard in Green Bay, Wisconsin is starting a machine that is going to use about 10,000 tons a month. We have Scott Tissue down in Mexico using about 4,000 or 5,000 tons a month. We have another one planned by Kimberly-Clark.

It's a good possibility that we could get one of these industrial toweling, household toweling machines in California, if we can get it permitted and put in.

MR. FORAN: The demand for that type of product is something which ties in with the aesthetic standards that I talked about.

It's encouraging that some relaxation of the aesthetic standards doesn't only apply to businesses but also household consumers. We have a passion for bleached white paper products.

Yet, right here at the Board, we have these wonderful hand towels in the bathrooms that you could practically shower with and dry off after a shower, and yet the brown paper towels are just as functional but certainly provide a greater opportunity for use of wastepaper.

That is something that we could look into promoting from a consumer perspective, acceptance of that type of product in the household as well as institutional uses.

MODERATOR HUSTON: Any other comments from the panel or audience?

MR. YOUNG: The Board might consider a little trip to every large manufacturer in the state just to ask them to use recycled paperboard.

MODERATOR HUSTON: The note that I wrote to myself it appears as though the demand outlook is strong enough for OCC, and it's a valuable enough product that we really don't want to try to send it to alternative markets.

Is that the case?

MR. JOHNSTON: From my perspective, it sure looks like a product that should stay in stream, be recycled back into an existing use.

MR. YOUNG: After suffering for five years with $50 OCC, I think we need all the markets we can get.

Sorry, Dick.

MODERATOR HUSTON: Okay. We're ahead of schedule. Let's take a break until three o'clock.

(Thereupon a brief recess was taken.)

MODERATOR HUSTON: Okay. Let's move on to number four.

We don't think we've had a 25 percent drop off.

Okay. Question number four, what are the most common and most detrimental quality-related problems with using OCC?

Some of these questions have been answered already. If there is additional information that you would like to provide, we'll start with Chris.

MR. GEYER: From a collecting standpoint, the thing that keeps being, that I keep being continually reminded of by Smurfit, the company that we sell our cardboard to, is to make sure that the quality of cardboard that we're collecting is something that they can use.

I would imagine, from our aspect, we need to focus as collectors to make sure that we are keeping the wax paper and wax board out of our stream.

MODERATOR HUSTON: Wax board, is that your biggest quality problem, the most detrimental one?

MR. GEYER: It is for us.

Especially, we have a restaurant and bar collection program, restaurants are notorious for putting wax board into their cardboard hoppers.

If they don't buy into the program of trying to sort it and doing a good job of keeping the contaminants out, somebody has to. It's usually us. Smurfit doesn't want to purchase, no one want to purchase those kinds of bales. No one does.

Contaminants are the biggest issue for us in terms of quality.

MODERATOR HUSTON: Chris, do you have some suggestions as to how we can better educate the bar owners, and bar keeps to keep that out?

I'm guessing. I don't have the foggiest idea how to do that.

MR. GEYER: I think it's just a constant reminder to owners that this is a material that has to be kept out of the recycling stream. That definitely needs to go to the landfill.

We need to find some kind of paperboard or cardboard that is acceptable that is not a contaminant. I'm not an expert in that.

Maybe there is a way to get away from using the wax board.

MODERATOR HUSTON: Okay.

Dick.

MR. JOHNSTON: Wax and OCC, as Chris mentioned, is a real problem.

To put it into an operating standpoint, why mills have a real problem with it is that wax acts like a lubricant. When you're trying to recycle paper fiber, you want to develop a rebonding of those fibers to make the product.

Wax, because it has the tendency to become a lubricant in the water system, it destroys the ability for the fibers to bond. Heavily waxed cartons pose a problem in trying to get the wax away.

You can usually do that with real high heat, but you have water with wax in it and you have to deal with the water that is now contaminated.

Wax cartons, short of somebody coming up from an R and D standpoint with some sort of material that is repulpable in place of wax, will continue to be a problem with OCC.

Another problem that we have seen in the last two years is the fact that many manufacturers that use corrogated boxes to ship the material, historically, and anyone who has bought a large appliance four or five years ago might remember this, they used to put the appliance box together with huge, enormous staples.

Believe it or not, those were not too much of a problem because they were such a heavy material that most, fairly rudimentary cleaning systems would throw out a heavy metal object like that.

If you buy an appliance today, you won't find that. What you'll find is that they run a seam of half-inch wide hot melt as a glue seam rather than a metal staple. Hot melt glues are very effective in sealing the box together and fulfill the user's need as far as selling his product in a box that doesn't fall apart, has an enormous downside for the recycler because hot melt for the most part is a material that has the same specific gravity as paper fiber.

When you recycle, it's neither a light material which could be floated or thrown away with light contaminants, nor is it a heavy material that could be thrown away as the metal was. It tends to just go with the fiber.

Where that becomes a real problem is from aesthetics and from paper production on aesthetic-sense it looks like when you produce it and it goes across the dryer as you dry your paper, you now have a very dark spot like somebody spilled oil or gotten a dark foreign material on your product which makes the product undesireable.

In the case of people making medium or liner, if they get into heavy contamination of hot melts, they can form a small holes that the web will break when they're producing the product.

Just in the producing sense, in a paper mill, heavy hot melt contaminants are difficult to deal with.

I know one producer of hot melt glue that is working on a water soluable recyclable hot melt glue, but it's not marketed yet because they haven't perfected it.

That will be a tremendous improvement. Anything that the State can do to encourage it, even with a letter, go for it guys. It's great. It would really help the recyclers.

The other one that doesn't affect all of the mills that use OCC but affects some of us, if we can educate the public not to commingle, keep OCC out separate. When we commingle and pick up the food trash and the other things that we really don't want, we take the value of something that is very recyclable and reuseable and salable, and we quickly start to degrade the value.

Commingled waste going to a transfer station for many recyclers is an unacceptable way to get their corrogated. It's better to come up with a method to separate at the source, and then we have a cleaner material and we will improve our recovery rates.

MODERATOR HUSTON: Thank you.

Bernie.

MR. MEYERSON: I think we have pretty much dealt with wax, and that is certainly a major problem.

I did mention before to Dick that Georgia Pacific has recently come out with a corrogated board that has a poly liner on it. The idea is to use that instead of the wax cartons.

Their literature says that it's repulpable with the poly liner. If that is so, that is one of the directions that R and D can go to find an alternative to waxing. It would certainly help.

Heavy taping is a problem for some users. Even though there's essentially one listed grade for OCC, in the export markets, you get a couple of variations, what is known as Japanese quality, Korean special OCC, and regular OCC, and most of those are related to the levels of tolerance of different kinds of materials which are in turn related to the effectiveness of their own cleaning systems back home.

Japan never really installed very sophisticated cleaning systems because their internal return system of OCC does very extensive cleaning of the material before it gets to the mill, so the mill never had to make big investments. When they want it from us, they want it in similar condition.

They have resistance to some of the OCC that is generated in Taiwan, the yellowish color boxes which don't have as good fiber yield not the same fiber strength, and the color bothers them a little bit, too.

There are individual variations. Certainly wax and plastic.

Then it goes without saying that in terms of the commingling issue that there are certain materials that you do not want with corrogated or any other paper product like glass, for example, would be just as serious a contaminant to OCC as any other paper grade in the papermaking process.

Very, very, heavy moisture, wetness, would be a problem because very, very wet fibers tend to breakdown early on. So, that's not very desireable either.

That's a seasonal thing.

MR. FORAN: I would like to follow-up with what Bernie mentioned about the poly-coated corrogated, and ask Richard -- I'm aware of the technology that handle poly-coated SPS, septic packaging, and people are working on that.

Is it conceivable to take a poly-coated corrogated and do the same process, remove the polyethylene coating, which may or may not be easier to deal with than wax, and come up with fiber and screen off the poly?

From what you know from your technical end, is that --

MR. JOHNSTON: I know of a mill in the U.S. that is buying milk carton stock today, at a very good price. I won't tell my friends to my left where or anything that would get me in trouble with those guys, but they buy milk carton stock at a very good price.

They do strip off the poly that is the milk carton stock. That gives them essentially almost a white pulp yield as their product. Yes, technologically, it's doable.

You're back to your choice as a capital investment for a cleaning system to deal with that specific.

I think what Bernie was suggesting is that Georgia Pacific may have announced a poly-coated material that would be thin enough to fulfill the requirement of the corrogated box user but at the same time maybe pop off in heat and normal pulping and become water soluable and break down so that it doesn't require specialized cleaning equipment to take it out.

MODERATOR HUSTON: Okay.

Steve.

MR. YOUNG: I'm going to sum up a bit.

OCC, the main contaminants are wax, poly and short fiber, which are foreign boxes, stryofoam, webstrength coating, hot melt, self-seal, smell and excessive moisture. Let's talk a little bit about each one of these things.

First of all, I have wax. Wax is a mainly concentrated in market chain bales.

I have done audits. I handle two of the largest market chains in Southern California. I have done audits of the bales. I stand there and sort each bale.

We sell it for select OCC. On the outside we couldn't find any wax. When we got in the center of it, I have a very good eye for what is called wax medium board, and the amount of wax medium board that I found in there was incredible. More than one percent. More like one and a half or two percent.

We did fine a couple of boxes which were waxed on the outside. Those were 50 percent wax by weight, which makes them a big contaminant.

There was a lot of poly. There was a little bit of short fiber, but they're mainly long fiber, mainly boxes made in the U.S.

There was some stryofoam. We didn't find much webstrength. You find those mainly in the banana boxes. Those are pretty much kept out.

We did find a lot of hot melt and self-seal. We did not have any smell, surprisingly, even though it was market corrogated.

We didn't have excess moisture because they basically don't add moisture.

Where you run into the problem with smell is in the transfer station operation. We find that when they sort the trash from the OCC, that it has an inherent smell.

We can ship fifty-container lots to almost any mill in the Orient, and we'll put three containers from a transfer station on there, the quality is a little off, but not much to the eye, but each time they tell us please do not include any more from source 27-A because the smell permeates our product and goes right through to the finish product.

When you deal with transfer stations, you have to be very careful. We have been selling these to medium makers in the Orient, and even they are complaining. It's becoming difficult for us move some of this material.

One thing we should do, and maybe the state, Allan Company or group of us would like to look at putting in a mill to use wax OCC. There is a use for wax OCC. It should command a higher price.

We could get the market chains to separate it out and use the wax as well as OCC.

MR. MEYERSON: I just heard last week that there is a company that is proposing to site in Modesto that is going to take just wax cartons.

MR. YOUNG: It's an egg carton, self-service tray carry style, all that material contains some wax, and it's all made from fiber.

The idea is, of course, to use the wax and fiber and conserve the wax. We have done a little bit of experiment with a couple of customers of ours, they have been able to use the wax fine.

I would not doubt that there is somebody in Modesto trying.

MODERATOR HUSTON: Okay. Any comments from the audience?

Any further comments from the panel?

Question number five, what activities and programs would be most effective for the Waste Management Board to pursue to assist the old corrogated market development?

Are new government programs needed, and at what level?

I'm not necessarily suggesting here that these be regulatory programs. Administrative, education, promotion programs are also under discussion.

Then finally, what can industry do to aid in the market development?

Steve, we'll start with you this time.

MR. YOUNG: I don't think there is going to be a need for government intervention into generating supply of OCC.

I think that the price, which should start to jump in the next month or two, is going to bring out an increasing supply. I think we're looking at very little probably ending up in the landfill.

I sat at a couple of a transfer stations and I'm buying the corrogated from one that generates 600 tons a day. He generates three loads of corrogated a week.

He probably generates four but he gets out only three of them. He has a crew of thirty guys picking.

There is not a lot of corrogated. That's 60 tons a week out of 13,000 tons. When you look at that, there's not a lot of corrogated going through the transfer station. That's a pretty good cross-section of commercial, industrial and household.

I think that subsidy to generate the material is not needed at the present time. What is needed is just a little helping hand from the State when one of these mills wants to do an expansion or somebody talks about putting in a new mill, maybe some hand-holding would be necessary, in other words, putting a crew together of an engineer and somebody familiar with the Boards around the state and can deal with the counties and cities, that would be a vast help to these people.

Everytime we talk to anybody when they talk about putting in a mill, they say, not in California. We're going to Arizona or New Mexico or X, Y and Z.

I don't know if it's the restrictions on the effluent, or if it's the power costs or what the exact parameters are which keep them from California. That has to be examined, defined and dealt with.

These are good industries. We want them in California. They are recycling. Their source of supply may be partially California, if they are out of state, but it's sure not going to be 100 percent California.

MODERATOR HUSTON: Thank you, Steve.

Bernie.

MR. MEYERSON: Actually I would like to pick up on one of the recommendations that Steve made at the beginning of our session, which was might be useful to have the State carry out a study to try to determine why the break bulk shipping seems to be more expensive on the West Coast than it is on the East Coast and see if there are any factors that could be mitigated to alter that.

I think the State should also support the kind of R and D efforts, like the kind that Georgia Pacific is being involved in, to see if something can be done to change the nature of wax packaging to see if there is an alternative more amenable to recycling.

Lastly, to reiterate something that I said earlier, it's terribly important, not so much as a positive action, but to encourage local communities not to come down unduly hard on the informal sector, because I think without the informal sector, especially the incremental recovery of OCC will be exceedingly difficult.

MODERATOR HUSTON: Okay.

Dick.

MR. JOHNSTON: I would suggest that an area of potential opportunity is in education of the businesses.

Perdominantly, it's retail and small industrial that do not generate enough to have a contractor agreement with a wastepaper hauler currently, and a lot of their corrogated material ends up in a trash dumpster.

As far as developing alliance, the best vehicles is the fact many of those small retail and commercial, small industrial people are in chamber of commerces in their city, we have a State Chamber that stays in contact with the local chambers, and I hope not at great expense to the State, the Board working through the State Chamber to the local chamber levels would be a natural vehicle to disseminate both the educational information as well as helping to establish a more alliance to make these things come about.

MODERATOR HUSTON: Thank you.

Chris.

MR. GEYER: I would like to second that.

Education, as far as a nonprofit collecting company is concerned, is probably the foremost aspect of this process.

The other thing that I think is important is to continue to bring the collectors together with the people handling the material so that we're all looking at the same picture. Sometimes when we're looking at the bottom line, it's easy to get discouraged.

Even though our best sense says we want to do the right thing, it's the bottomline that dictates the day-to-day. It's encouraging to be at a meeting like this and see that we're looking at a bright future.

Education, especially with the business segment of communities, as Dick said, the small chains, the little centers of ten or twelve small stores, they really don't generate enough cardboard to get into the situation where they are able to contract with a major hauler, but they have enough cardboard that ends up in the landfill that no one is taking.

Continuing to try to promote the recycling of that material and encourage the local governments to work with the haulers and nonprofits and anyone else who is out there working to try to keep it out of the waste stream.

MR. FORAN: Chris, I would like to ask what your sense is of the prevalence of operations similar to yours in other communities?

While Richard's suggestion is well taken to try to get the word out to municipalities through the chambers of commerce and otherwise to try to tap into the untapped sources of OCC, it's still a logistical problem of who is going to collect that with small volumes generated?

MR. GEYER: In a situation like Placer County, which is a small county, rural in nature, if it's not a collecting company like for profit or nonprofit, for profit or nonprofit, if you're in recycling, the municipalities are going to have to do it or hauler is going to have to do it. Someone has to get in there.

There has to be incentive for them to provide those types of programs. It has to happen. It cannot continue to go into the landfill.

In our county, we're looking to build a dry MRF will eventually take that material. There is a real conflict between source reduction, which in my opinion is the key, to a dry material recovery facility, or a dirty material recovery facility that is going to take all of the waste stream.

In the period of time that it gets built, I think that what is going to happen it's going to be profitable to be in cardboard recovery for the next six months to a year and a half to two years, and people will get into it.

MR. FORAN: What can the Board do to encourage more operations, such as yours, with low overhead, to tap into the marginal supply?

MR. GEYER: That's where education has to come in.

If I'm out there saying as a collector to a business, look, this is a cost-saving program to you. They are expecting a sales person to say that. In effect, that's what I am.

You need to, the State and local government needs to reinforce that this is really the only way that we're going to make this work is that we have to collectively get together. It gives me credibility when I'm out there trying to argue that point of view with a business person.

Even though the bottomline you can show them, if they are paying $30 a month for each time to have their five yard dumpster removed, if you can save one or two dumpings because of the cardboard, you're talking $60. Give me some and you put some in your pocket.

It's a hard sell to overcome.

MR. YOUNG: Dick operates twenty plants. Those collectors collect from all of the smaller shopping centers. It's the basis of supply, the liquor store, and mom and pop burger store, and all of the rest of the smaller facilities.

If the price drops too low, they will stop collecting. To date that has not happened.

MR. MEYERSON: I would like to build on that and say, I think the first order of activity in any community to determine whether to support a nonprofit group or ask the city to pick up something is to find out what is actually going on there.

I think that you will find in most communities as long as the price is at a reasonable level, you're going to find an element of this mosquito fleet. It's not very effective to create an institutionalized structure to force those guys out of business, because there is tremendous social benefit to those people doing what they are doing.

Not only the positive of what they are bringing in, but the fact that they are earning somewhat of a living off this and what impact they have on the welfare community if they are not in the position to do that would be a tremendous cost to the community.

It's important. Just because they are an informal sector doesn't mean that they are not important. That should be investigated first. We should not assume that a community just has a blank slate with nothing happening.

As Steve indicated, one of the quickest ways to find out if that structure exists are to identify the buy back areas within a reasonable area and find out who is bringing in the material to them.

Not specifically, but are they served by a mosquito fleet? If they are, chances are that they are doing a pretty good job.

MODERATOR HUSTON: Okay. Any comments from the audience?

MR. FORAN: I would like to say that it's well taken. You folks are seeing the mosquito fleets.

Our people are seeing statistics coming in from the cities and counties of how much corrogated is ending up in landfills.

Even with more accurate estimating procedures such as through the Western States Marketing Study, you still have 1.2 million tons of corrogated going to landfill. Be that as it may, I don't think we should be leaving the means to themselves for the corrogated to come up.

Maybe as prices come up, that disposal figure will go down and the mosquito fleet will be more active. Project Go and those organizations are not what I would consider institutional and necessarily impinging on the mosquito fleet.

The private nonprofits certainly serve a beneficial use or of great benefit to our society as well.

MR. GEYER: The reality is, talking about Placer County, the number of buy backs that pay for cardboard right now, there is two for the whole county.

We're not talking cardboard on the same level as aluminum cans. If someone is going around collecting cardboard to stay off welfare, we should probably let Pete Wilson know immediately, so that he can come up with a new program because there is lots of cardboard out there.

MR. MEYERSON: There is one more point that I would like to stress about supply and demand as it relates MRFs that the Board should keep in mind.

There is an inverse relationship between demand and the volume that is generated in a MRF. When demand is low and prices are low, the MRF will get tremendous volume of the material compared to when demand is high and prices are high, that material will never get into the waste stream because scavengers will come and pull it out before it gets in the waste stream.

You have a situation where, and the MRF of under tremendous ongoing pressure to move all material that it generates when it generates it. If you get too much MRF creation to pull things like corrogated, they will be pulling their highest levels of volume at points of lowest demand, which would be a tremendous market distortion, which would further negatively impact the price situation, and that is not very healthy for a commodity market.

The advantage of this gentleman's kind of operation and the mosquito fleet is that they work in a way compatible with supply and demand. They go pull this stuff, the incremental tonnage when it's called for by price and will not do it when the demand is too low.

That's much more amenable to the market.

MODERATOR HUSTON: Okay.

MR. YOUNG: Let me add one other thing.

Talking about MRFs, we're talking about a cost of anywhere from $60 to $80 a ton to get the material through a MRF. If you add that cost to the collection cost of $40 a ton, or $50 a ton, you end up with a cost of $110 to $130 a ton.

When you put this kind of a floor on OCC, you will not have any OCC going to any MRF. There will not be any to pick out.

MR. FORAN: Are you suggesting that it's going to be a $130 a ton corrogated prices?

MR. YOUNG: You's put a floor on corrogated of anywhere from $110, you'd put a floor on the collection cost and MRF cost on corrogated.

Our floor cost in LA is about $22 a ton to dump trash, and about a $35 a ton collection fee. Okay. So you have $57, you're going to double that floor price.

That means that Allan Company is going to put three-yard bins in every commercial and industrial building for five miles on either side of it's plant, and every other wastepaper plant is going to do that, and we're going to charge X-amount of dollars per bin and pick it up and give the guy credit for the corrogated, depending on what the market is.

The MRF will not have corrogated to sort out. They won't have to worry about sorting corrogated.

MODERATOR HUSTON: Okay.

Now, are we done with question number five?

Okay. Question number six, this one can go quickly if that's good.

Are the standard industry definitions for corrogated adequate, or do you think that further refinement of these definition is necessary?

Chris, we'll start with you. You're on the collection side.

MR. GEYER: At present, they seem to be, from my standpoint or our standpoint, clear enough.

As it evolves, we need to make sure that we're aware of that. Usually we don't have any problem being told what is happening or what the changes are.

I don't have a problem.

MODERATOR HUSTON: Okay.

Dick.

MR. JOHNSTON: The suggestion that I have is that you go back to the people that you got your initial survey data from and make sure they understand what corrogated is. I have a feeling that they counted something other than corrogated.

MR. FORAN: For the high generation figures?

Yes.

MR. JOHNSTON: Other than, I don't have a problem.

MODERATOR HUSTON: Bernie.

MR. MEYERSON: I think that the present standards are perfectly adequate.

I can conceive of someplace down the line if the relative proportions change very much that there might be some mention in the PS standards of the short fiber material. But other than that, not very much.

I can tell you very easily why they had such a high generation figure. Knowing how they carried out their studies, it's actually a figure derived from disposal, from an analysis of material disposed. Since it's so visible, and so easily identified, my sense of it seeing how a lot of those were carried out at the landfills, that the people who were assigned the job of actually picking the stuff out and separating it out in the catagories, OCC got done very well, and the other stuff didn't get done so well, so it got to be a very distorted figure.

MODERATOR HUSTON: Okay.

Steve.

MR. YOUNG: Guidelines, I suggest, as Bernie said, an Oriental OCC grade because there are some plants generating that, and it's becoming more prevalent.

As to the conclusion that we are recovering 26.1 percent of the corrogated in California, that's not true. My guess is that we're recovering somewhere around 70 percent. The generation figures are enormous.

The United States produces 24 million tons of craft liner board medium a year. We're roughly ten percent of the population. We should be using 2.4 million tons. We're probably recovering 1.8 to two million tons, if you take out what we take through from out-of-state, Arizona and Utah, et cetera.

It's obvious that the Board needs to look at who is doing these surveys and how they are doing them and set the parameters as to how they are done. When the decisions are made based upon surveys taken, and those surveys are inaccurate, you can spend millions and millions of dollars going in the wrong direction.

MODERATOR HUSTON: Okay.

Any comments from anybody at this point? Any questions?

MR. GEYER: I think that's really true.

A lot of the consultants that help put some of these figures together are probably now collecting cardboard to make a living.

MODERATOR HUSTON: Okay. Anything else?

MR. FORAN: Response to Chris, they are selling market development plans to the state for corrogated.

MR. GEYER: It's good that they are doing something.

MODERATOR HUSTON: Okay. I want to particularly thank the four panelists who are here today. I'm delighted that you took the time and shared your expertise and opinions and knowledge with the staff and others in the audience.

I think most of audience is our staff, but that's useful for us. I do not want the lack of filled chairs in the audience to be any indication at all that this is not an important topic to us and that we're not concerned about what we do or how we do it to either stimulate markets or not to stimulate markets, as the case may be.

Thank you all. I encourage and invite you to continue to stay involved in our process. Brian, I know will be sending you his Draft Action Plan just as soon as it's ready. We would appreciate your comments on that. Give us your feedback as we are developing our comprehensive plan for the Board to pursue over the next eighteen months to two years, give us your feedback on that as well.

This morning's session had a recommendation that we continue to have meetings with industry, that we get involved and have forums, meet with the various companies and various segments of industry to share information and bring problems and solutions to light, and I think that's a very exciting kind of activity that the Board can do, and I encourage all of you to stay involved with that to the degree that you can.

Thank you so much. The workshop is closed.

(Thereupon the workshop was adjourned at 3:55 p.m.)

CERTIFICATE OF SHORTHAND REPORTER

I, VICKI L. MEDEIROS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me, Vicki L. Medeiros, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this sixth day of November, 1992.

Vicki L. Medeiros

VICKI L. MEDEIROS
Certified Shorthand Reporter
License No. 7871